

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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WITH
SUPPLEMENT.] { PRICE FIVEPENCE
PER ANNUM, BY POST, £1 4s.

MR. JAMES CROFTS, STOCK AND SHARE BROKER,
No. 1, FINCH LANE, CORNHILL
(ESTABLISHED 1842).
HOLDERS of Mining Shares DIFFICULTY OF SALE in the open market may find
purchasers for same through Mr. CROFTS' agency.
CASTLE AN DINAS and BELOWDA BEACON recommended at present prices.
Every description of shares bought and sold at NET prices.
Daily Price List on application.
Bankers: The City Bank.

MMR. W. H. BUMPUS, STOCK AND SHARE DEALER,
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the
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75 Aberdauanant, 10s. 6d. 40 East Van, £5 5s.
15 Asheton, £3 1/2s. 50 East Llanguyng, 25s.
60 Australian United, 15s. 10 East Lovell, £1 1/2s.
25 Birdseye Creek, £2 1/2s. 25 Flagstaff, £1 1/2s.
50 Bog, £1 1/2s. 100 Frontino, 2s.
35 Boscas. Downs, £2 11 1/2s. 15 Gawton, 2s 1/2s.
2 Buller, £1 1/2s. 5 Great Laxey, £1 1/2s.
60 Caegwyn, 10s. 10 Great Vor, £6 1/2s.
65 Camp Floyd, £2 1/2s. 35 Grogwinion, 30s.
100 Cwm Elan (fully pd.), 7s. 9d. 50 Gold Run, 16s.
40 Cedar Creek (fully paid), £3 1/2s. 10 Hington Down, £8 1/2s.
20 Carn Camborne, 17s 6d. 25 Mark Valley, £4 1/2s.
75 Chontales, 17s. 40 New Querbra, £3 1/2s.
60 Don Pedro, 16s. 20 New Lovell, £1 1/2s.
15 Eberhardt, £6 1/2s. 50 New Dolcoath.
50 Plymlimmon, 17s. 6d. 35 West Maria, 28s. 6d.
30 Emma (Silver), £1 1/2s. 60 Parys Mountain, £1 1/2s.
20 East Caradon, £4 1/2s. 50 Yudanamutana, 15s.
Also, 200 shares (£25 6s. paid) in the North Wales slate Company (Limited), at
10s. each.
W. H. B. transacts business in every description of shares at the best market
prices, and free of commission.
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Bankers: City Bank, Finch-lane, E.C.

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Some valuable hints as to the purchase of mining shares will be found in Mr.
Thompson's "Investment Circular" for January, now ready, post free, price 6d.

MMR. E. J. BARTLETT, STOCK AND SHARE DEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at
best prices in every description of shares.

SPECIAL BUSINESS in Minerals, Frank Mills, East Seton, East Boscaswell,
West Go-lolphi, Welsh Ironworks, Willoughby, and Great Rock shales.

Mr. E. J. B. desires to direct the attention of his friends to the reports received
from Denbighshire and North Pool Mines, inserted in the paper. For permanent
investment or rise in price these cheap shares should be secured.

MMR. T. R. COMYN, STOCK AND SHARE DEALER,
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Bankers: National Provincial Bank of England.

A purchase of the following shares at the present prices cannot fail to realise
handsome profits either for investment or for a rise in price. The mines are being
vigorously and legitimately developed:—

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immediate application.

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30 Boscaswell Downs. 50 East Sheboygan.
20 Bampfylde. 50 Fortescue, 2s.
30 Bog, 32s.
50 Frank Mills, 11s. 3d.
25 Birdseye Creek, £2 1/2s.
50 Gold Run, 16s.
25 Castle Van, 2s.
10 Hington, 2s 3s. 9d.
10 Lampard. 50 Rosehill, 16s. 6d.
5 Cook's Kitch., £2 1/2s.
50 Cathedral. 10 Lovell, 2s 1/2s.
50 Don Pedro, 15s.
50 Devon Consols, £7 1/2s.
2 Devon, £6s.
25 East Seton, 2s 6d.
30 East Caradon, £4 1/2s.
10 East Van, £1 1/2s.
10 East Lovell, £1 1/2s.
25 East Grenville, 2s 3d.
40 East Llanguyng, 30s.
15 Eberhardt, £6 1s. 9d.
5 Emma, £1 1/2s.

MMR. GEORGE BUDGE, STOCK AND SHARE DEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established
22 years), is SELLER at net prices of:—
25 Gawton, £2 1/2s. 65 Llanarmon; 15 East Lovell, £1 1/2s.; 75 Crever and Wheal
Abraham, 11s. 6d.; 75 Excelsior, 8s. 3d.; 10 West Polbroke, £3 1/2s.; 3 North Roskear,
£2 1/2s.; 25 Pennerley, £2 1/2s.; 50 Great Retallack; 50 Cathedral, 10s. 6d.; 20 West
Gwennap, £2 1/2s.; 45 Boscaswell Downs; 60 Nangiles, 27s. 6d.; 70 West Jewell;
4 Minera, £2 1/2s.; 100 West Caradon, 3s.; 60 Penstruthal; 5 Mark Valley, £3 1/2s.;
2 Wheat Buller, £1 1/2s.; 60 Caegwyn, 18s.; 65 Cwm Elan, 8s. 6d.; 20 Wheal Grenville;
65 Great Caradon, 9s. 6d.; 100 South Tolcarne; 10 New Rosewarne; 50 Parys
Mountain; 35 Perran Wheal Vyvyan (fully paid); 50 West Pant-y-Go, 4s. 6d.;
80 Ruby; 35 South Roman Gravels, 36s. 6d.; 10 East Van; 30 West Esgair Lle;
20 Prince of Wales, 15s.; 20 East Grenville; 50 Hobb's Hill; 50 Plymlimmon, 16s. 6d.;
20 New Pembroke; 2 Blue Hills; 30 Cedar Creek, £3 1/2s.; 100 Gold Run, 16s. 6d.;
100 General Brazilian, 6s. 3d.; 50 Birdseye Creek, £2 1/2s.; 150 Frontino and Ballyva;
125 Anglo-Brazilian, £6 1/2s.; 5 Eberhardt, £6 1/2s.; 20 Last Chance; 60 Sweetland Creek;
25 New Querbra, £3 1/2s.; 10 Flagstaff; 10 Emma.

WEELY MINING CIRCULAR, EVERY FRIDAY.—
LONDON DAILY RECORD, STOCK & SHARE LIST, Every Evening.
Published by P. WATSON, Stock and Share Dealer, 79, Old Broad-street, E.C.
Bankers: The Alliance Bank, and Union Bank of London.

MMR. ALFRED COOKE
(Son and Successor to the late Mr. EDWARD COOKE),
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Bankers: Alliance Bank (Limited).

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Established 1857.

MESSRS. W. DUNN AND CO., STOCK AND SHARE
DEALERS, 3 and 4, GREAT WINCHESTER STREET BUILDINGS,
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Orders received and commissions received as usual.
Bankers: National Provincial Bank of England.

W. D. and Co. do not insert a list of shares for sale in this week's MINING JOURNAL,
but are, as usual, in a position to supply all market shares at the closest possible
price if favoured with offers, and for those shares not daily quoted, their means of
negotiating business, either for purchase or sale, are both varied and extensive.

W. D. and Co. trust that the manner in which they have conducted their business
during the year now closing will be the best guarantee for the next, and trust to
receive a continuance of past favour and support.

W. D. and Co. can sell at net prices the following:—30 Boscaswell Downs, at
£2 7s. 6d.; 10 Emma, at £1 1/2s.; 10 Flagstaff, at £1 1/2s.; 10 Pacific, £1 1/2s.

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MMR. J. GREGORY, STOCK AND SHARE DEALER,
CROSBY HALL CHAMBERS, BISHOPSGATE STREET, E.C.

MMR. WILLIAM WARD
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Every information respecting both British and Foreign Mines will be furnished
free by post or on application.

Priore-List daily.
Bankers: Alliance Bank.

MESSRS. A. ENDEAN, FISHER AND CO., STOCK AND SHARE
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Business transacted in all marketable Securities for cash or account.

A. E. F. and Co. strongly recommend the purchase of Bampfylde Copper Mining
Company's shares. Another important discovery has taken place. Captain S.
Mitchell says—"I am very pleased to advise you that we have opened on a north
lode, half a mile north of the Bampfylde lode, which is lasting first-rate, producing
splendid yellow and horse-flesh colour copper ore close up to surface." From this
discovery a rise in the price of shares is inevitable. The company have sold at
Truro Ticketing for 21s., 55 tons of copper ore. Shares should be bought at once.
Bankers: London and Westminster, Lothbury.

INVESTORS IN ENGLISH AND FOREIGN BONDS,
Railways, Bank Shares, Mines, should consult
THE "INVESTMENT REVIEW,"
Independent, Fearless, and Exhaustive.

MMR. CHARLES THOMAS,
MINING AGENT,
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MESSRS. A. W. THOMAS AND CO.,
10, COLEMAN STREET, E.C.,
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MESSRS. G. LAVINGTON AND A. PENNINGTON,
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Birdseye. Mary Ann. Sweetland Creek.
Eberhardt. West Wheal Gorland. Malpaso.
Flagstaff. Gold Run. Butler.
Kitty (St. Agnes). Pacific. Rica.
Cedar Creek. East Van. West Esgair Lle.

Parties wishing to purchase or sell in the foregoing are requested to make early
application.

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Is able to obtain reliable information concerning British and Foreign Mines. The
long experience he has had is at the service of the public.

And invites instructions concerning mines not dealt in on the London market,
providing always that the undertakings are bona fide.

Established Fifteen Years.—Bankers: City Bank.

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Are in a position to deal in all kinds of Stocks and Shares, British or Foreign, and
will advise, gratuitously, whether to buy or sell in the following:—

Wheat Whisper. Harvest. Hobbs Hill.
Castle an Dinas. Mendip Hills. Ambrose Lake.
Monkton Manganese. Tamar Consols. Alt-y-Crib.
Goonians. Gwennap. Cwm Ricket.
But may especially those mines legitimately bordering upon dividends.

WANTED TO PURCHASE—500 or any less portion of shares in the Bryn Tin
Mining Company (Limited), not exceeding 36s. per share; and 1000 shares in the
Bampfylde Copper and Iron Mining Company (Limited).

INVESTORS IN ENGLISH AND FOREIGN BONDS,
Railways, Bank Shares, Mines, should consult
THE "INVESTMENT REVIEW,"
Independent, Fearless, and Exhaustive.

BY JOHN R. PIKE, STOCK AND SHARE DEALER,
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Post free, Threepence.

BARTLETT AND CHAPMAN, STOCK AND SHARE
DEALERS, 26, CORNHILL, LONDON, E.C.

"Handy Book for Investors," 530 pages, cloth bound; second edition, revised and
enlarged, and with a copious index, post free, 10s. 6d.

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"Investment and Financial Record," post free on application.

Bankers: London and Westminster.

FERDINAND R. KIRK, STOCK AND SHARE DEALER,
4, BIRCHIN LANE, LOMBARD STREET, will BUY or SELL, at the
closest prices, the FOLLOWING SHARES:—Belovia Besse, Boscaswell Downs,
Castle-an-Dinas, Old Batholes, Pennerley, and Rookhope Valley.

MMR. THOMAS SPARGO, MINING ENGINEER, STOCK AND
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OLD BROAD STREET, LONDON, E.C.

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FINANCIAL AGENT,
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GENERAL ASSAYER, LISKEARD,
Analysis of every Mineral Product carefully conducted.

MMR. E. CAVENDISH TAHOURDIN, 13 and 14, CORNHILL,
E.C., and SHREWSBURY, has for IMMEDIATE SALE for CASH,
and SPECIAL BUSINESS in the following SHARES, and is also prepared to Sell
the same for delivery in three or six months, on receipt of a cover of 25 per cent. of
the purchase-money, or to make advances thereon on moderate terms:—

30 Aberdauanant. 40 Fortescue. Rookhope Valley.
15 Alt-y-Crib. 15 Flagstaff. 20 Refadfa.
30 Bog. 150 Gold Run. 10 Sierra Buttes.
25 Boscaswell Dowds. 20 Gawton. 50 South Carn Brea.
1 Botallack. 5 Great Laxey. 30 South Aurora.
20 Birdseye Creek. 20 Hington Down. 20 South Caradon.
Bryntwysth or Grog- 5 Herodfoot. 10 South Condurrow.
winion. 20 Lovell. 5 South Crofty.
50 Bronfloyd. 20 Blaen Caelan. 10 South Tolcarne.
500

THE METAL MARKET—ANNUAL REVIEW.

REMARKS.—In presenting our readers with the usual annual summary of the metal trade, it shall be our endeavour to condense the history of the past year as much as possible, and yet to afford the information desired in such a clear and succinct form as shall prove useful for reference.

The year now closing upon us opened with unusually bright prospects. The metal market was animated in all its branches. Demand was considerably in excess of supplies; prices had already advanced, and were still advancing; but this did not in the least check the flow of business. Buyers rather exhibited anxiety to close their contracts before a further rise in price should place them in a less favourable position, and the great difficulty experienced in conducting business had not so much reference to price as to delivery. Stocks had run low in almost all departments, and as the demand set in it was found impossible to meet it. The cheap rate at which money was to be obtained aided the development of various undertakings, and afforded at the same time, perhaps, too great facilities for the carrying out of speculative transactions. The activity experienced in the metal trade was by no means exceptional; all branches of trade and commerce seemed to share in the almost universal prosperity. The Right Hon. Hugh Childers thus described the condition of the country at the commencement of the year 1872:—"From a variety of causes England enjoys at the present moment the largest amount of material prosperity, I believe, known in modern times. Our commerce, home and foreign, is at its highest, and I have even failed to find a farmer who grumbled." The home demand was all that could be desired. The continental trade showed increasing vitality. America appeared on the scene as a large buyer, but our own eastern dependencies held aloof. The speculative element which had been very apparent, began to subside somewhat towards the latter end of January, and transactions were chiefly effected to meet the legitimate requirements of trade. The deposit of a million sterling in the Bank of England on account of new railway projects to be brought forward during the Parliamentary session was viewed as one indication of probably increased activity in one branch of the metal trade, while the anxiety for the opening of the northern ports, so that shipments might be commenced without delay, was another indication that a busy time was expected.

With the opening of February began whispers of possible complications with America, and the market at once became sensitive, prices began to fluctuate, business became less active, and although trade on home account was good foreign buyers seemed disposed to hold off for the possibility of lower prices. An influence in the opposite direction which more than counterbalanced the tendency to lower price now began to make a stir. The operatives in the various departments of metal industry commenced an agitation for an advance in wages, and a readjustment of the hours of labour, and so successful were they in carrying out their demands, that the possibility of lower rates no longer remained a doubtful question, but the extent to which it would be necessary to raise prices so as to keep their men together by paying advanced rates of wages was a matter which, at this early season of the year, engaged the earnest attention of the masters. About this time, too, it became apparent that the demand for iron for railway and shipbuilding purposes especially, would be greater than it had ever been before, and it was self-evident that the abnormal demand which had arisen for this one metal must necessarily be accompanied by proportionate demand for most other metals. In view of the prospect thus opening, we wrote in the early part of February—"The whole of this year promises to be one of great prosperity for the metal trade, and, after so many years of adversity, this will, doubtless, be appreciated by all concerned." The tide of advancing prosperity received a check upon the announcement of what for many succeeding months was known under the name of the Alabama difficulty, which, without doubt, influenced timid people to a much greater degree than there was any due cause for, but contracts had, previous to this, been placed to such a large extent that manufacturers were comparatively indifferent to the partial cessation of the flow of orders which they now experienced. Throughout the month of March demand kept generally increasing, Russian and American orders especially found favour in our markets, and as prices began to stiffen the impression gained ground that nothing was to be obtained by holding back, and that, both as regarded price and delivery, it was well to give out orders without delay. Owing very much to the depression of former years, brought about by the American war, the continental wars, rash speculations, and various other causes, many large and important public undertakings had been deferred until funds should be forthcoming to carry them out.

The financial elasticity which was exhibited not only by those nations which had been at peace, but by those whose resources had been drained by protracted and ruinous wars, was a matter of unfeigned surprise, and it soon became clear that the projects of former years, as well as those which kept continually cropping up as the prosperity of the current year became established would, so far as it was possible, be carried out in the year 1872. A spirit of enterprise was aroused which not only strove to redeem the past, but which strained every nerve to keep pace with the ever-growing requirements of the age. The close of the first quarter of the year had witnessed a resuscitation which had far exceeded the most sanguine expectations, and the prospects for the second were all that could be desired. On Thursday, April 3, the Bank rate was advanced to 3½ per cent. This movement did not in the least diminish the flow of business, but only tended rather to consolidate the markets, and after a time higher prices again ruled. Operations of great magnitude were entered into, and the opinion that the rise in the value of metals was of a comparatively permanent character was very generally held, and was proved by the readiness with which contracts were offered, the great question being not so much the price at which the orders should be booked as the time when the delivery might be looked for. In addition to the vast increase in orders for home consumption and the shipping trade, a large speculative demand sprung up, almost all the metal markets wore an appearance of unwonted animation, and had it not been that the statistical position was sound, and that the legitimate demand was greater than the capability of supply, a sharp reaction might this time have been looked for. During the second quarter of the year, increased demand for money resulted in the Bank rate being raised from time to time, but beyond restricting the facilities which had presented themselves to speculators the increased value of money did not interfere with the legitimate development of trade. The high prices which some metals had now attained began to attract attention, and suppliers of the raw material endeavoured by stimulating production to take advantage of the existing demand, but notwithstanding the efforts thus put forth, it was not until long after that supplies came forward in sufficient quantities to check the upward tendency of prices. As the month of June opened, the prospects of a good harvest, an easy money market, and the final adjustment of the Alabama claims, which had been utilised for so long a time as a handle for the speculators to turn to their own advantage, seemed to promise a continuance of the prosperity which had marked the past five months of the year.

Trade generally was in a most healthy condition, pauperism on the decrease, abundance of employment for able-bodied men and for skilled labour in every branch of industry, so that the amount of business transacted seemed to be limited rather by the amount of labour available for the carrying out of the projects in hand than by the fact that the requirements had been met, and but little more remained to be done than to carry on the ordinary current business of the day. On Thursday, June 13, the Bank rate had again fallen to 3½ per cent. General activity in the various branches of the metal trade prevailed, and the tendency still continued to further advance in price. The following week Bank rate fell again, and thus increased impetus was imparted to the metal market. The month of July was marked by an important rise in the price of coal. Trade disputes, locks-out, and strikes became of frequent occurrence. It began to become very apparent that the higher the rate of wages the less the amount of work done, and the greater the improvidence of the labouring classes, so that what ought to have been a boon and a blessing, and an index of the commercial prosperity of the country, turned out to be almost

an unmitigated evil. The issue of the French loan during July concentrated public attention in that direction, and diverted it from metals. The heat, the summer holidays, the scarcity of raw materials, as well as the labour difficulty, all tended to restrict business during this month within somewhat narrow limits, and it was well that it was so, for had the pressure experienced during the early months of the year continued it would have been impracticable to keep pace with it. Breathing time was needed, and it was not until the seventh month of the year that it was obtained. Operations in metals during the month of August were not of an important character, and need no particular comment. One or two failures of large houses which were believed to have been connected indirectly with the metal trade tended to increase the quietness which was beginning to steal over almost every department. Prices were so high, and the great pressure that had necessitated the policy of "buy at any price being no longer so severe, as contracts were fulfilled and large deliveries made, intending buyers preferred biding their time to entering upon any further engagements.

In the early part of September the increasing tightness of the money market began to create a measure of uneasiness, and judicious caution was exercised in avoiding unnecessary extension of operations in metals. Speculators for the rise retired to the background. Operators for the fall felt generally that the market was too sound to admit of a panic being successfully organised, and turned to their advantage. High prices, which still ruled, met not with a ready response from home or foreign buyers. The Indian markets especially refused to believe in them, and had it not been for the great caution which was observed a crash would, in all probability, have followed, but this was happily averted. As the month of September wore on sellers began to consider the advisability of making some small concession in price. Order-books which had been well filled began to look somewhat empty as old outstanding contracts were completed, and the most serious feature which now presented itself was the presence in our midst of successful foreign competition. Before the close of the month several large contracts which had been offered to English firms and rejected were accepted by continental firms upon terms that it would have been advisable should have been secured by our own countrymen. This might not have been, and probably was not, altogether the fault of the masters, but it is a matter of regret, in taking a view of the operations of the past year, that owing to whatever cause valuable business was allowed to pass us, which by a happier mutual understanding between employers and employed might have been secured. There was a time when in many branches of the metal trade, if not in all, England was admitted to be ahead of her continental neighbours. An honorable rivalry has of late years sprung up, and unless every nerve is strained to the uttermost we shall no longer maintain our supremacy. In beauty of design and delicacy of finish our rivals are running with us a neck and neck race, but with the great natural advantages we possess in the supply of all raw material in the immediate vicinity of our industrial centres it will be our own fault if we do not maintain that supremacy, but most assuredly it will not be done without an effort. The month of October, during which autumn contracts are usually given out, and to which makers look as the time to begin filling their books for the winter campaign, was remarkably unproductive. The money market was against any such proceedings. Weak speculative holders were compelled to realise at the best prices obtainable; and, consequently, metals held on speculation dropped during the month, but yet it was felt that as soon as these weak speculators were weeded out, and the metals thus sold had gone into consumption or into the hands of strong holders, that the markets being intrinsically sound, although the highest prices might not be maintained, yet the drop would not probably be so serious as might otherwise have been anticipated.

Until Nov. 28 money, which had gradually been creeping up, and had for some time stood at 7 per cent., was reduced to 6 per cent. The continuance of dear money had tended to the contraction of business within narrow limits; and when, about the middle of November, telegram from America announced the terrible conflagration at Boston, a semi panic on the Stock Exchange ensued, which tended considerably to increase the uneasiness already existing in respect to financial matters. Commercial affairs are invariably so materially affected by the course of the money market that it was not a matter of surprise that at this juncture business, which had already become seriously restricted, should experience a yet further curtailment; besides which, as the end of the year approached, merchants and consumers manifested a disinclination to extend their engagements, and, the condition of the markets offering no inducement to speculators to operate, it was pretty clear that transactions would be confined, so far as home consumption was concerned, to absolute immediate requirements, and, as regards exports, simply to the execution of orders. In the early part of December any tendency that otherwise might have been developed towards a resuscitation was checked in measure by the aspect assumed by French politics. M. Thiers and the Kerdrel Commission were quite sufficient to create a *bête noir* in the minds of many, and the possibilities of a French revolution were conjured up, which might threaten to disorganise the whole course of our commercial relations with the Continent and continental dependencies. On the other hand, the prominent place occupied by the German buyers in the London market, and the announcement that the Prussian Minister of Commerce was about to solicit from the Prussian Chamber a credit of 17,000,000^l sterling for the construction of State railways tended to inspire confidence; and this being followed by the reduction on Thursday, Dec. 12, of Bank-rate to 5 per cent., together with the publication of such returns as served to remove any apprehensions of monetary difficulties, a disposition to speculation again became manifest, general business improved, and prices advanced.

In taking leave of our readers at the close of 1872, and offering them our best wishes for the coming year, we cannot but congratulate them upon the success which must have attended the enterprises of the year now closing upon us. During the first half of the year a tide of prosperity set in, such as had not been experienced for many a long year, and few there were who had not wisdom to seize the golden opportunity as it passed. The latter part of the year witnessed a reflux, but not of such a character, nor to such a degree, as materially to mar the harvest gathered during the earlier period. How far political events at home or abroad may affect the course of our markets during the year upon which we are now entering it is utterly impossible to say; but we enter upon 1873 with the conviction that our markets were never in a sounder condition than they are now, and we can see no reason why, if the same forethought and caution be exercised in the conduct of affairs during the coming year as has generally characterised the past, it should throughout its course yield similar satisfactory results.

COPPER.—Before the close of the year 1871 copper, which for a long period had been a drug in the market, and had fallen to a very low price, showed distinct marks of improvement. A large business had been concluded in Chilean, and Australian varieties especially, at advancing rates; and the fact was becoming more generally recognised that the advance which had taken place was something more than a repetition of what may be termed spasmodic spurts. The firmness of the market, it was acknowledged, was due to shortness of supplies and large deliveries. English varieties, more particularly manufactured copper, has not throughout the year been in proportionate request. From the commencement of 1872 up to the present time manufacturers have looked for the expected demand from India and the East, but hitherto they have looked in vain. During the first week of January smelters paid 17s. 6d. to 18s. per unit for ores and regulus, and Chili bars were sold at 80s. to 90s., according to brand and prompt. Throughout the month the market continued in a very sensitive condition. Various rumours were current, which from time to time were calculated to depress the market; but, in reviewing its course throughout the month of January, the chief characteristic observable was the unshaken confidence exhibited by holders of the metal. In the first fortnight of February transactions reported were not on an extensive scale, the market became quiet, and prices receded; but during the latter half of the month demand increased, and business was concluded to an amount which in the aggregate represented considerable quantities. Numerous sales of Chili bars were effected at improved rates, both for cash and prompt. Australian also participated in the movement. English remained without alteration, but sellers were firm. At the end of February Chili bars were quoted from 82s. 6d. for Lots, cash, to 85s. g.o.b., with extended prompts. Wallaroo stood at 92s. In the early part of the month of March considerable quantities of copper, weakly held, passed into the hands of those who were better able to hold until such time as the market should advance sufficiently to admit of their realising a profit. Wallaroo found buyers at from 92s. 10s. cash to 94s. 10s. per month, but before March 15 Chili bars had risen to 87s. cash, and the principal holders declined to realise even at these prices, as the demand seemed to be becoming general, and the expectation of higher prices was

strong. The continental trade was good. Stocks in England, France, and America were reported to be 50 per cent. lower than they had been the previous year at the same time.

The third week of March was one of unusual excitement, resulting in large and great confidence in the stability of the market became apparent. The amount of business transacted at that time may be estimated at several thousand tons, and the market witnessed an extraordinary amount of activity. The excitement which prevailed was unparalleled. The amount of copper which changed hands over again was far in excess of the actual stock to, perhaps, three or four times. The closing price for Chili bars, according to brand and prompt, 85s. 10s. to 97s. During the first week in April the price of Chili bar copper rose to 100s., at which price over 1000 tons were sold. In the second week most extensive business was transacted, and operatives exhibited more confidence in the market than when prices were lower. Consumption was increasing, copper was in request for cable work and for engines to a much larger extent than formerly, and the prospects for the future were favourable. During the third week the Alabama question cropped up, and buyers grew somewhat shy, and the market receded to about 97s. 9d. for Chili bars. Early in May a good business was done at about the prices above quoted, at which period Australian copper stood at 104s. The second week experienced a further rise, and contracts for large quantities of metal were passed down, so that it was no exaggeration to characterise the transactions for the week as having been enormous. Many parcels changed from week into strong hands, and the copper either went into consumption or was held for still higher rates. Consumers, shippers, and speculators all came forward together, and infused great animation into the market. One feature especially commanding attention at this time was the fact that India had not yet responded to the rise which had been established in the home market, and that Australian copper and Japan copper, which ordinarily were shipped to India direct, had been diverted by reason of the high prices ruling in the English market into that channel. Thus it was argued, and not without reason, that every probability existed that India must sooner or later come forward as buyers to the extent of some thousands of tons. During the third week of May advices were received that copper shipped from England to India had been transhipped to this country, and sold at prices sufficient to cover the double freight and insurance. Ores and regulus had risen to 20s. per unit, and Japan copper had realised 101s. Before the end of May the copper market received a further impetus in an upward direction, owing to the rise in coal, and the well-founded rumour that much higher prices for fuel would rule for long.

Large purchases of Chili and other raw foreign copper were made at, for the former, 100s. to 110s., according to brand and prompt, and for Australian 110s. to 120s. Stocks on the South American coast were reduced to a minimum. The price of coal in Chili was about double what it had been a short time before, and labour was becoming very scarce. The official price lists during the first week of June were as follows:—English tough copper, 110s.; best selected ditto, 112s.; sheets and sheathing, 121s. Buyers freely offered 115s. for tough, but smelters refused. Chili bars on June 14 sold at 107s. to 110s., according to brand and prompt. At this time prices had calmed down, and from this date the tendency has been very gradually at first, and afterwards more rapidly, to lower prices. In the first week of August we report "The position of the market at the moment seems safe." On the 27th smelters announced a reduction in fixed rates of 7s. on manufactured and 8s. on unmanufactured, making the official price of tough and the 103s.; best selected, 105s.; and sheets, 110s. Chili bars at the close of August had fallen to 90s. per ton, and by the last week in September 83s. cash was the price quoted. The lowest point to which the market has fallen during the year was towards the middle of October, when Lots were sold at 70s., Wallaroo at 85s. 10s., and a parcel of Japan copper offered for public sale was bought in. Ores were quoted on Oct. 11 at 16s., but by the 25th *idem* the market had so far recovered that g.o.b. Chili bars had been sold at 84s., and by the end of the month 86s. was the price at which business was done. During the last two months of the year money has had the effect of depressing copper, and it must not be forgotten that as a rule the copper market drops at the close of the year and advances at the turn of the year. It would not beoken any great amount of wisdom to venture upon a prediction as to the future course of this market, at the same time it may be safe to observe that it is intrinsically sound, and that it will be contrary to all past experience and expectation if after the new year has set in we do not see a strong market and higher prices. As we write the market is advancing. Chili bars have found buyers at 86s. cash to 87s. 15s. two months. Wallaroo ingots have been sold at 93s. ; cake, 92s. ; and Japan, 88s. Yellow metal during the greater part of the year was upheld at advanced rates; but, sympathising with copper, dropped when this metal fell to 7½; since that time, however, sellers, having disposed of their accumulated stocks, have raised their prices, and a fair amount of business has been transacted at 7½ to 7¾, but sales at the higher price have been limited, owing to the continuance of the lack of demand already commented on from India.

IRON.—The course which this market has followed throughout the past year is best laid before our readers by reference to the statistics carefully published in the Journal. On Jan. 5, 1871, pig-iron in the North of England was quoted at 63s. 6d., and in Glasgow at 74s. 7d. Welsh rails of American section were sold at the works at 82s. 10s., and merchant bars 84s. 15s. and 91s. On Feb. 2 Scotch pigs were quoted 77s., and the shipments showed an increase, as compared with the same period of the previous year, of 14,000 tons. It is usual for stocks to increase during January, but last year stocks in that month decreased by 12,000 tons. Swedish iron in the beginning of February was offered at 12s. On March 8 Middleborough pigs were at 76s.; Scotch pigs, 81s.; increased shipments, 36,000 tons; rails, 91s. On April 5, Scotch pigs, 90s.; increased shipments, 47,000 tons. On May 3, Welsh railway bars, 10s. 10s.; merchant bars, 10s. 15s.; Scotch pigs, increased shipments, 65,000 tons. On June 6, Scotch pigs, 96s. 6d.; increased shipments, 55,585 tons; Swedish bars, 14s. 10s. On July 5, North of England pigs were quoted 105s., and Scotch pigs 117s. The position of the iron market at this time may be gathered from a glance at the following figures, such prices having never before been realised:—Gartsherrie, at Glasgow (deliverable alongside), 135s.; Coltness, 140s.; Calder, at Port Dundas, 132s.; Langloan, 135s. Increase in shipments since Dec. 25, 1871, 95,000 tons. On Aug. 2 Scotch pigs, after having advanced to 157s. 6d., receded to 131s., and the increase in shipments stood as last month at 95,000 tons. On Sept. 6 North of England pig-iron was 120s.; rails, 11s. 5s.; and merchant bars, 13s.; Scotch pigs, 130s.; increased shipments still remained at 95,000 tons. On Oct. 4 Scotch pigs were reported at 127s. 6d., and the increase of shipments, as compared with the similar period of the former year, had fallen to 79,000 tons. On Nov. 1 the price of Scotch pigs had fallen to 110s., and increased shipments to 52,000 tons. On Dec. 5 Scotch pigs had advanced from 90s. to 95s., and the total increase of shipments was 27,000 tons. Since then considerable speculation has ensued owing to the increased shipments, which have risen again to 33,000 tons, and the strikes which have taken place in the mining districts preventing any increase in stocks, which are already very much reduced. The market is in a sensitive state that the least sign of activity causes the price to advance rapidly; mixed numbers have again realised 125s., at which a good business has been transacted.

LEAD.—In common with most other metals, the lead market opened very firm at the beginning of the year. Good soft English pig was quoted at 19s., at which price holders were very generally unwilling to sell. Throughout the month there was but little change. Towards the middle of February there were signs of renewed animation. Large enquiries were made on Russian account as well as for other markets, and good soft English pig was not easily obtainable at the current quotations. In March the enhanced prices demanded for both labour and materials employed in the production of pig lead tended to stiffen the market, and before the close of the month 19s. 15s. was paid. In April there was no change in price, but the market maintained its firmness. By the end of May pigs had advanced to 20s. 5s. During June business had become contracted, and the market was consequently not so firm. In July the builders' strike tended rather to depress this metal, and sellers were prepared to make some concession in price to secure orders. Depression continued up till about the middle of August, when pigs were quoted at 19s. 12s. 6d., but without finding much of a market. Before the close of the month a demand had set in, and prices had advanced to 20s. 10s. The market was firm throughout September and October, but with the opening of November an increased demand set in, and higher prices were paid for pigs up to 20s. 15s. and 21s. Supplies continued limited, and holders displayed no eagerness to make sales of any very large quantities at these prices. Owing to the continuance of the increased demand from America, a further advance of 5s. was established before the end of November, and by the middle of December pigs were quoted 21s. 10s. to 22s., at which the market closes.

SILVER.—The market for Silesian has been very steady throughout the year. The lowest point touched was during the early part of the year, when some sales were made at 21s., and the highest figure attained was in the autumn, when in a few instances 22s. was obtained. The average price during the year was about 22s. The advance is attributable rather to reduced stocks than to any great demand. The improvement in this metal has naturally affected the price of the manufactured sheet zinc, which has advanced during the year from the lowest point about 2s. to 3s., and meets now with a ready sale at the increased value.

[Concluded on page eight of this day's Journal.]

CLEVELAND IRON TRADE—RETROSPECT FOR 1872.

The year which is just about to close has been, on the whole, one of the most prosperous in the annals of the Cleveland iron trade. Improvement has taken place in many directions in the introduction of new and improved appliances and processes, in the advancement of the wages of all kinds and classes of operatives, in the profits of the masters, in the erection of new works and extension of others, and in the general tone and prospects of the trade. While the old year is dying we may descend more fully into particulars.

In the first week of January there were 125 furnaces in and 7 out of blast. The quotations were for No. 1, 69s. to 70s.; No. 3, 64s.; No. 4, 64s., net cash. Coke was then difficult to procure, and ironstone was also supplied in insufficient quantities. These things had the effect of hampering the operations of ironmasters, and prevented them from taking full advantage of the tide which was setting in. Still, the prospects of the trade were so excellent that masters were unwilling to accept the above rates, and in some cases they were allowed from 3s. to 5s. per ton more. The favourable state of the market was attributed in no small degree to the stock returns for the preceding month, the make of pig-iron for December having reached the previously unprecedented amount of 163,469 tons, or an increase of 3153 tons on the make for November. Makers' stocks at the end of December stood at 65,601 tons, as compared with 104,601 tons for the corresponding month of the preceding year, while warrants only stood at 2730 tons, as against 12,730 tons at the same date.

With reference to the finished iron trade, we may remark that the year opened with rails at 9s. 5s. to 9s. 10s., and some of the manufacturers had sufficient work on hand to last them through the spring. Plates took a higher range, and were quoted at between 11s. and 12s. During the preceding year the make of the latter class of iron had been greatly extended in the Cleveland district owing to the development of the iron shipbuilding trade. Crown bars were quoted at 10s., and puddled bars at 9s. 10s. to 9s. 15s.

tion of January had come short of that month by about 3000 tons. This was attributed to the falling off in the supplies of coke. During the month the stock in warrant stores had been reduced until at the beginning of February there were only 2000 tons in store. It was in this month that all classes of iron commenced to rise with such rapidity, and the supply was so unequal to the demand that coal had never previously been used for the purpose was taken for making coke, while slack and other indifferent material that had previously been regarded as almost worthless was bought up with the greatest avidity. South Durham was unequal to meet the requirements of the Cleveland district, and coal had, therefore, to be obtained from Normanton and elsewhere. The deterioration in the quality of the minerals led to a decrease of production, furnaces that had previously been able to turn out 500 tons a week with ease, having had their capacity restricted to 400 tons. It was in this month that Danks' puddling machine was tested for the first time in the Cleveland district at the Tees-side Ironworks, where a furnace was erected entirely for experimental purposes. The results of the trial were most gratifying, and the iron produced, which was exhibited on 'Change at the third pig-iron market in February, was pronounced to be of a higher quality of puddled bar and ball furnace iron than the ordinary puddling process could manufacture. The Cleveland Ironmasters' Association thereupon made arrangements with Mr. Danks, whereby it was agreed that he should not charge more than 25/- for the patent right of each furnace, and 2s. per ton of a royalty on the iron produced. On these terms several of the principal firms took immediate steps for the erection of furnaces on Mr. Danks' principle, those of the North of England Industrial Iron Company at Carlton, and Messrs. Hopkins, Gilkes, and Co., of Tees-side Ironworks, being among the number. Altogether, it was agreed that Mr. Danks should receive under a provisional arrangement 50,000/- for the patent rights of 200 of his furnaces by April 10. In the meantime, however, an opinion was received that Mr. Danks' patent was not valid, and under those circumstances the patentee was told that the above agreement would not be ratified. The question was left open, and its settlement was entrusted to a committee of gentlemen, who arrived at the opinion that the patent right of Mr. Danks had been properly secured. Upon this discovery the negotiations for the use of his furnace were re-opened, and a new company (called the Vulcan Iron Company) was projected, specially for its introduction and use. Since then, however, Mr. Danks has returned to the United States, and has left Mr. Jones, of Middlesborough, to act as his representative in this country. In this resumé of the trade of the year which we have made we may state the result of the operations of Danks' furnace, as witnessed at the Tees-side Works on April 5, by a large body of gentlemen occupying the foremost position in the trade. The fettling consisted of a mixture of American ore and pottery mine, although it was stated that the local fettling material answered perfectly well. As a sample of the work done it may be stated that at 11:45 the furnace was charged with a quantity of Cleveland metal, previously melted in a cupola and poured in the liquid state into the furnace. There was no means of ascertaining the weight beforehand, but when the charge was drawn from the furnace at 12:25 and hammered in the usual way, it weighed 5 cwt. 2 qrs. 15 lbs.

With the exception of the introduction of the Danks' puddling furnace there was no other event of either March or April calling for special notice. Towards the end of the latter month differences arose between the employers and the employed in the malleable iron trade, owing to the latter wishing to limit the hours of labour and do away with Sunday fettling. The matter was referred to the arbitration of Mr. Rupert Kettle, who, at a meeting of the arbitration board held at Darlington on May 2, decided that no puddler shall be required to fettle his furnace or any other on Sunday, or before 5 o'clock on Monday morning. With reference to the other matters, the arbitrators determined "that the experiment of commencing the shift for puddlers at 5 of each morning and evening, and fixing 3 o'clock for the hour after which no charge shall be put in the furnace, be tried for the remainder of the year; and that, if it is found by experience that heats are lost by this alteration, the master shall be at liberty to re-open the question without prejudice."

In the month of May the ironstone miners of Cleveland threatened to jeopardise the prosperity of the trade by largely restricting their output, in consequence of their employers having refused compliance with a demand for 2d. additional per ton. The evil became so imminent that several firms had really made up their mind to damp down their furnaces, but, at the last moment, this was averted by the holders of ironstone royalties granting the concession asked for by the miners. During the first week of June No. 1 was quoted at 107s., and makers were on all hands behind with their deliveries. Coke, which was selling in January at 15s. per ton, was not now procurable under 2d., and even at this enormous figure it was often of inferior quality. Rails had advanced from 10/-, 10s., to 11/-; plates, 12/-, to 12½/-; common bars, 11/-, to 11½/-; and puddled bars, 8/-, to 8½/-, 6d. Durham h-hold coals were selling at from 13s. to 14s. per ton. The number of furnaces had increased at the end of the half year to 131 and 9 out of blast, making 140 in all. The following is the production of the first six months in 1872:

Month ending January 31, 1872	Tons	160,599
" February 29		155,672
" March 30		159,000
" April 30		163,408
" May 31		168,795
" June 30		162,297

Total for the half year 1,009,651

SECOND HALF-YEAR.—Although the second half-year commenced with a continued upward tendency in prices, it was expected that the turn had almost been reached. This view was not based so much upon any slackening of demand as upon the unprecedentedly high rates that were demanded for all kinds of material, both raw and manufactured. Coke, which was selling at 15s. per ton in January, and could be bought for 10s. to 12s. per ton in July of last year, was now eagerly bought up at 32s. per ton for next year's delivery. Coal, both household and manufacturing, was advancing in the same proportion. For present delivery, or cash within a month, No. 3 was sold at 110s., and No. 4 at 107s. Bars were quoted up to 12½/-; crown bars, 15/-; plates, 12s., 10s., to 12½/-; puddled bars, 8/-, to 9/-, 5d. The principal event of July was a meeting of the Board of Arbitration, at which the wages question in the finished iron trade was amicably settled, on the understanding that the employers would suspend the sliding scale, and advance wages, 12½ per cent., making 20 per cent. in all on the year. The tactics of the miners were systematically restricted the out-put of coal in order to force up their wages, was beginning now to operate injuriously on the trade of the district, and diminished very considerably the production of pig-iron. In one lot of pits in South Durham the output had been lessened to such an extent that there was a difference of 60,000 tons for the half year ending June, as compared with the same period of the previous year. The mineral traffic of the Stockton and Darlington Railway showed a diminution of 12,000 tons for the last week in July, as compared with the same week in 1871, and there was a deficiency of 6000 tons in the iron ore sent to the furnaces in Cleveland for the same period. Shipments also suffered, there having been a difference of 100,000 tons in the coal exported between the Humber and the Tyne for the month of June. During the last week in July the Cleveland Iron market was forced up to 4/- for No. 3, by the extraordinary rise in the Glasgow market the previous week. Yet, in spite of their anxiety to take advantage of the tide in their affairs, ironmasters found their operations "cabin'd, cribbed, confined" by the obstinate perversity with which their miners and other operatives kept down the supplies of raw material.

During the month of July, for example, although there were 13 more furnaces in blast, there was only an increase of 4000 tons in the production—instead of 18,000 or 20,000—as compared with the same month in 1871. Although new pits had been opened out in several parts of the districts, the regular output of iron ore was kept from 10,000 to 12,000 tons weekly below the quantity sent out in the spring, the average output for the months of July, August, and September being at the rate of 65,000 tons per week. In August there were only three furnaces out of blast in the whole of Cleveland, the total number in operation being 133. Matters remained without much change until the end of October, when the value of both iron and coal began to fall, and the applications of miners and ironworkers for additional wages were met by a decided negative. During the last week of December coal kept firm at 40s. per ton for best qualities, and secondary sorts were not less than 35s. The output of both coal and coke had increased so much that there was an ample supply on hand, and stocks had commenced to accumulate at the pits, although to a very limited extent. The quotations of iron had receded a little from the high rates of August, but 100s. could still be had for No. 3, and 90s. to 95s. was offered for that number for next year. The following is a very close approximation on the make of pig-iron for the second half-year of 1872:

Month ending July 31, 1872.	Tons	162,603
" August 31		162,808
" September 30		163,000
" October 31		164,600
" November 30		165,822
" December, assumed to be		164,000=982,833

Putting these figures and those of the first half-year together it will be observed that the production of pig iron in the Cleveland district for the past year has been in round numbers 2,000,000 tons. The value of this enormous quantity, on the basis of 100s. per ton, will be at least 10,000,000/. It would be idle to deny that the past year has been a prosperous one for ironmasters generally, and that their profits as a rule have been exceptionally large. But they have not all, as many people imagine, been colning money. Some of them, on the contrary, have reason to regard the results of this year's operations as anything but successful—that is, where long contracts had been made that nearly absorbed the whole production, and still remain unexpired. Having to pay more than as much again for their coke and coal, in addition to from 20 to 35 per cent. more on all classes of labour, some of the Cleveland ironmasters found themselves in such an awkward position that it was whispered about "Change and elsewhere" that more that one firm is in what is vulgarly termed "a queer mess." These difficulties have, however, been tided over, and makers are more careful about making contracts for the future, especially as there is abundant promise of 1873 being at least as prosperous as the year that is now dying out.

These remarks lead us to bestow a few thoughts, more particularly on the future, which is at once assuring and perplexing. It is not at all likely that ironmasters will suffer as they have done from inadequate supplies of raw material, new pits and mines having been opened out in both South Durham and the Cleveland district, which, when in full operation, should greatly increase the output, probably to the extent of a full sixth. The Cleveland Miners' Union now numbers 6000 members; but the actual number of ironstone miners at work in that district is calculated at upwards of 8000. The Union repudiated the idea of restricting the output of stone for the sake of keeping up their wages; they referred this cause of complaint to the bad ventilation and defective timbering of the mines. At the Miners' Conference held in Durham, in November, a deputation was appointed to inspect the Cleveland mines, with the object of verifying these complaints. Early in December the inspection was commenced, and as the mines had been generally represented as a great charnel-house, the most frightful disclosures were expected. But the deputation (Messrs. Foreman and Grieves, who are respectively the presidents of the Durham and Northumberland Miners' Associations) could find little or nothing to reprove, and, like the prophet Balak, they could only bless where they expected to curse. No mineowner will deny that his mines are more or less imperfectly ventilated, but this is only the inevitable and insurmountable result of the use, on a large scale, of blasting-powder.

In a mine employing from 300 to 400 miners there will probably be 800 lbs. of powder used daily, and this necessarily generates a bad atmosphere. The mineowners cannot overcome this evil, although they may do much to mitigate it, and all that is possible most of them have sought to do, as the deputation in the course of their inspection were frequently compelled to admit. It is now hoped that the miners, having had their complaints so thoroughly enquired into, will give more regular and satisfactory work than they have hitherto done.

There are now from 25 to 30 new furnaces in course of construction in the Cleveland district. Most of these will be ready for use in the course of next year, and, with the expected improvement in the miners' labour, there is no reason why the production of pig-iron for 1873 should not be upwards of 2,500,000. Middlesborough is improving her dock and railway communication; the Hartlepool are doing the same; Stockton is fast becoming an important centre of ironmaking operations; and the whole district of Tees-side is flushed with hopeful anticipation, and full of vigour. We cannot close this retrospect without felicitating our Cleveland friends on their great achievements in the past, on their prosperous and active present, and last, but most important of all, on their sanguine and unclouded prospects for the future.

Meetings of Mining Companies.

GLASGOW AND CAPE BRETON (NOVA SCOTIA) COAL AND RAILWAY COMPANY.

A special general meeting of shareholders was held at the offices, Great Winchester-street-buildings, on Monday,

Mr. HORATIO L. MICHAELLS in the chair.

Mr. WALTER WRIGHT (the secretary) read the notice convening the meeting, which stated that a report would be offered to the shareholders relating to the company's railway, mines, and affairs generally, and the following resolution would be proposed as a special resolution:—"That the 40th clause of the Articles of Association be altered, by inserting the sum of 300,000/- in place of the sum of 200,000/- appearing therein." The above resolution, if duly passed, would require confirmation at a subsequent meeting, at which, if the resolution were confirmed, it was intended to propose a resolution for increasing the capital of the company to 300,000/-. Of this due notice would be given in the usual course.

The CHAIRMAN said he should, in the first place, request Mr. Elkin, who had been out in Nova Scotia, to read his report.

Mr. ELKIN explained that the document he was about to read was not couched in the ordinary terms of a report, but was a mere narrative of facts gathered by personal observation. He then read his report, as follows:—

You were pleased to think that the intimate knowledge I possessed of the affairs of the company might be of benefit if I visited Sydney during the autumn, and I gladly consented to pass some time at Cape Breton before proceeding to the United States, so that the facts which I might collect could be placed before you. Although, on the whole, the money seems to have been well laid out, the expenditure appears to have been incurred without reference to whether the funds of disposal of the company were adequate. In illustration of this, I would mention the additional block of 12 double houses for miners, and the erection of Edmaston-street wharf. The houses were indispensable in order to secure the permanent presence of coal-cutters and other labour, without which the output of the colliery would have been altogether insufficient to supply contracts; the wharf has been of great service in enabling the machinery and other materials sent out by the company to be discharged, and had not been for this the expense of landing and warehousing at a private wharf would have been considerable. The chief advantage of the use of the wharf having been obtained, I advised Mr. Harvie to let it, and this has been done at a rental of \$600 per annum for four years, by which arrangement the expense of employing a wharf master is also saved. The value of the Falmouth-street wharf will eventually increase by a portion of the water area being filled up by vessels discharging ballast, thus enlarging the wharf. The steamers Dione and Joseph Dodds, chartered by the company on the earnest recommendation of Mr. Gisborne, must prove a very heavy loss; and although the actual result cannot be ascertained until these steamers have arrived here, one being expected here daily and the other at the end of January, I am almost sure that the loss will be at least 9000. The first loss arose in the long time that the Dione took before being able to enter Sydney, and although she made Cape Breton in 19 days after her departure from Liverpool, the actual cost to the company, before she had finished discharging cargo, was 1300/-. The delay arose entirely through the unprecedented winter, of which, at the time, confirmatory details appeared in the newspapers, this weather also causing much injury to the railway, prior to the completion of which both steamers had to be chartered to near ports, causing a loss in each voyage owing to long delay. I am confident that in the first instance the chartering of steamers was imperative, in order to establish a sale for coal at once, for without these steamers at command Mr. Gisborne could not have made contracts to deliver, as irrespective of the uncertainty of obtaining tonnage on the spot when required the attempt to secure it hurriedly would have made the rate very high. There cannot be any doubt that the loss that will arise from these steamers would have been materially reduced had not the unloading been seriously interfered with by the prevalence of the horse disease in nearly all the ports, causing at times a perfect standstill in all traffic.

I visited the Reserve Colliery and buildings attached, and can testify that in all the arrangements made by Mr. Gisborne his chief object seems to have been to secure completeness with economy. The great excess of expenditure has arisen from his failure to supply contracts; the wharf has been of great service in enabling the machinery and other materials sent out by the company to be discharged, and had not been for this the expense of landing and warehousing at a private wharf would have been considerable. The chief advantage of the use of the wharf having been obtained, I advised Mr. Harvie to let it, and this has been done at a rental of \$600 per annum, besides securing office room for the use of the company. With reference to the cost of the railway, I have endeavoured to arrive at a close calculation, and I specify the sum as 104,000/. The original estimate was 82,500/-, yet it is not difficult to trace many items of this excess. Among other items, the cost of making the line longer than was at first estimated, when Cow Bay was to be the terminus, and instead of 21 miles the rails and sidings ultimately laid will be 23½ miles. The engineer supposed at the time that the works on the line to Schooner Pond would not cost much more than had the original route been adhered to; and although I do not think the excess will be much, yet it is due to state that no actual survey of that part had been made. The bridges have also cost beyond the estimate, owing to the necessity of deeper piles driving to reach solid foundations than was originally anticipated.

The entire length of the line was finished in November, and the coal of the Lorry and Schooner Pond Companies was carried during that month. The return of Mr. Young will enable your engineer, Mr. James Samuel, to prepare a detailed report, but I cannot close this subject without stating that competent parties have assured me that the works are well done. Regarding the liabilities of the company at Sydney, they amount to—

For the colliery, and chiefly for buildings \$18,000

To this must be added pay-sheets for November and December 14,000

The liabilities for the railway will be 18,000

Thus making a total of \$50,000, or £10,000

which sum has to be paid by Jan. 10.

To meet this, besides the cash in the hands of Mr. Harvie, and further sums he is likely to collect from local sales, there exists the money to be received for coal shipped by Mr. Gisborne, which will, it is calculated, be sufficient to meet the above expenditure, but leave no balance for liabilities in England. You are aware that it is necessary to provide funds to pay for the five winter months during which time no coal can be shipped, and at least one month beyond, this expenditure being represented by the coal raised during these months. As the outlay will for railway and colliery during such period be \$2300 monthly, a sum of \$500 will be required, and you will bear in mind also that by the custom of the trade at least 75 days must elapse before money is received for coal sales.

I found that the monthly returns of the quantity of coal raised that had been shipped to you were fallacious, as they included slack, of which at least 7000 tons was used by the railway as ballast. The actual tonnage of round coal raised to November was 17,461, and the great disparity between this quantity and that represented by the letters as having been raised greatly changes the financial calculations made prior to my departure. Regarding the cost of raising coal, I have gone most carefully into the matter, and have ascertained that in future it can be put on board at \$1.50 per ton, including royalty, railway carriage, and wharfage. The selling price will next year be \$2 for large quantities, local and occasional sales being made at slightly higher rates. The probable profit for next year would on the above basis be as follows:—

Sales of 80,000 tons of reserve coal £8,000

Railway carriage on 80,000 tons of reserve coal £4,000

" " on 100,000 tons Lorway and Emery £6,500

" " on 50,000 tons Schooner Pond £6,500

£13,000

The working expenses I take at the high rate of 40 per cent. 6,000= 9,500

Total £17,500

Deduct—Interest on 6 per cent. £20,000 debentures £1,200

Interest on 7 per cent. £30,000 debentures 2,100

Expenses in Nova Scotia and London 2,500= 5,800

£11,700

The quantity of coal in 1874 will be increased to 100,000 tons from the reserve, and naturally all the other collieries will also have an increased output, the extent of output being simply a question of labour.

With reference to the reserve coal, the reports received have been highly satisfactory, and Mr. Gisborne has obtained contracts from the Grand Trunk of Canada, and expects to make others with the New York gas companies (who have already used the coal) during next year, besides contracts at other ports. Whilst I was at New York a great anxiety was entertained to obtain three large cargoes at high rates, and the near approach of winter compelled Mr. Gisborne to refuse supplying them. I was informed at Halifax that the coal was much liked, and during this winter the agents will have a moderate stock on hand, which will realise to well advantage. I was there told that the captains of the small trading vessels spoke well of the pier of the company, and of the despatch they received—this testimony is of importance, for it becomes known to captains of steamers calling in at Halifax. I am confident that no fear need now be entertained that the coal raised in Cape Breton

good reason to congratulate the shareholders that the mine is in so satisfactory a condition. One great advantage which the company has obtained, and which should not pass unmentioned, is the discovery of the swallow, at the 100 fm. level. This swallow drains the mine effectively to that depth, and had they not been fortunate to discover this easy means of getting rid of the water it would be impossible to drain the mine in the winter without very great expense, as the old workings during the very wet seasons had to be entirely stopped, but since the discovery, some time back, the mine has been effectively drained to the 100 fm. level. This is a great saving to the company, as the engine has only to work, on an average, three days a week, and that for the purpose of drawing ore, raising water for the condensers, washing one, &c. The directors wish the shareholders to understand that, although one end only has been spoken of as being very rich, they must bear in mind there are several ends, all bearing lead, and which it is intended to open out next spring, when it is hoped the weather will be more favourable for developing them. They also expect by that time to have Hughes's shaft down to the 100 fm. level. As soon as this piece of work is completed the directors are sanguine that the sales of ore will be considerably augmented, thereby affording increased dividends; but, as heretofore, they do not desire to promise too much, in case of disappointment, yet, so far as human foresight can judge, they anticipate a dividend next June considerably larger than the present one. In conclusion, the directors beg to state that they have the fullest confidence in the mine, and in their very able agent, Capt. John Lloyd; and they feel certain that now, as the mine, though but in its infancy, has entered the Dividend List, it will go on and prosper. The shareholders may rely that, as far as the directors are concerned, the most energetic mode of working the mine, with due regard to economy, shall be observed, in order to develop to the greatest advantage this exceedingly promising undertaking.

The Captain's report was then read, as follows:—

The unprecedented wet season we had of late greatly interfered with and impeded our progress in developing the mine. We withstood all rains and floods well until about eight weeks ago, when the water began to force itself in from every point of the old workings, and found its way down through the smallest fissures and crevices in the rock, bringing with it an enormous quantity of mud and sand; however, the swallow never failed to take all the water sent into it, thus proving itself an everlasting means of draining all floods that we may be subjected to in the rainy seasons, and thereby saving us a vast expenditure that would otherwise be required in pumping the water to surface. In driving the 100 level upon Parry's lode south we discovered a course of rich ore, from which we have been making all our sales during the present year. This lode is now worth 30 cwt. per fathom of driving, leaving ore in the back and bottom of the level for reserves; and I may here say that this lode is in entirely virgin ground from the surface. We also intersected what may be termed a new east and west lode, running nearly parallel to the Parry lode, and drove a few fathoms upon it each way; and it is now worth to the east 3 tons of lead per fm., and to the west 5 tons per fm., and is a most promising rich vein. We have driven the said 100 level upon Parry's lode, north of engine-shaft, and found the ground stiff to begin with, but it improved after cutting through the bar, and is now opening into very ground worth 30 cwt. per fathom, with fine indications for further improvement. We compute to have raised from this end upwards of 5 tons of lead ore ready for drawing.

Main Engine, or Campbell's Shaft: Owing to continual rains we suspended all operations upon the great Parry lode below the 100 level, and, in fact, no work has been done on this vein during the present year for that reason alone. When left to stand there were three stoves of ore ground in the 120 yard level west, of the following value:—No. 1, worth 2 tons of lead per fm.; No. 2, 1/2 tons; and No. 3, 1 ton. The 140 yard level west was left with a stove of ore ground in the back, worth 2 tons per fm. The engine-shaft is short in depth of about 5 fms. to reach the above course of ore, and should be sunk as soon as the weather becomes fit. Hughes's shaft, which was commenced six weeks ago, is now down about 20 yards, and has come into very fine mineral ground. It is as well to mention that this shaft is sunk on the junction for the purpose of working the new east and west vein, and for ventilating the mine, and it offers a good chance of dropping upon a new deposit of ore at 40 yards deep. We have about 25 tons of ore in course of dressing and ready to be drawn up, but are sorry that we had to blank last sale; but, in spite of all our energy, it could not possibly be avoided, owing to the continual floods in the 100 cast by a fall from the old workings, which blocked up the course of water to the swallow; but our next course of ore will be double the usual amount. We have now overcome all difficulties as far as can be seen, and have firmly secured the 100, as well as repaired the engine-shaft, which was weak in some places. We have completed the new lead-house, which will be of great convenience to us, and will enable us to safely stock the ores in a proper manner. We have also made two boulders to dress the clayey ore stuff, and have built a wall, which was greatly needed to shelter the dressing floors. The whole of the machinery is in excellent order and repair.—JOHN LLOYD.

The CHAIRMAN said that after the very complete and satisfactory reports that had just been read it would be unnecessary to add anything to them; therefore, he only desired to congratulate the shareholders on the very cheering prospects that had fallen to the lot of the Prince Patrick Company. From the time he had first been a shareholder he had felt the greatest confidence in this mine; and it was in the very greatest satisfaction to find that the promises which had been held out from time to time had now been fulfilled in so substantial a manner, as showed a credit balance in favour of the company of nearly 50,000. He was also glad to find that they were in a position to pay a dividend of 10 percent. upon a sum of profits from sales of ore, leaving a balance to be carried to the next account. Before concluding, he wished to say that great credit was due to the able managing director (Mr. T. Hughes), through whose perseverance and economy the financial position of the mine was now in so satisfactory a state.

After sundry questions relative to the working of the mine, machinery, &c., which were satisfactorily answered by the managing director, it was resolved that a dividend be declared at the rate of 10 per cent. per annum, payable on Dec. 31. A vote of thanks to the Chairman terminated the proceedings.

HINGSTON DOWN CONSOLS MINING COMPANY.

A general meeting of the shareholders was held at the offices, Great St. Helens, yesterday, to audit the accounts, to declare a dividend, and to transact the general business of the company.

Mr. W. A. THOMAS in the chair.

The SECRETARY (Mr. Thomas B. Laws) read the notice convening the meeting, and the minutes of the last were confirmed.

The accounts, made up to December 27, showed a credit balance of 2074. 18s. 4d., and an estimated balance in favour of the mine at the next meeting of 1634. 19s. 9d.

The report of the agents stated that the discoveries in view are sufficient to ensure a continuance of prosperity for some years.

The CHAIRMAN said that although he had no faith whatever in mining estimates, nor did he consider they were at all to be relied upon, yet he might mention that, notwithstanding the low price of copper ore and the high price of labour, the accounts just submitted showed an actual balance of 2074., the estimated amount having been 2400. The committee, after due deliberation, had determined to recommend a dividend of 5s. per share, which would leave a balance of 502., towards the monthly cost of 650., but there were ore bills payable in January amounting to 813., and they were told that the next three sales would realise 1000., each, beside carriage, amounting to 54. On the other side there would be four months, each amounting to 650., and dues and office expenses, leaving an estimated balance in favour of the mine at the next meeting of 1634., as compared with 2074. at the present meeting.

A SHAREHOLDER asked the meaning of the last statement in the agent's report. —The CHAIRMAN said that statement meant that, judging from present indications, a continuance of prosperity was ensured; of course, such a statement was subject to all the variation of a mining prediction.

The accounts were passed and allowed, and, with the report, were ordered to be entered on the minutes.

A dividend of 5s. per share was declared.

It was resolved that a special meeting be convened for the purpose of determining as to the disposal of the forfeited shares.

A vote of thanks to the Chairman terminated the proceedings.

MINERAL HILL SILVER MINES COMPANY.

An extraordinary general meeting of the shareholders was held on Tuesday, at the Cannon-street Hotel (Mr. JOHN TAYLOR in the chair), for the purpose of passing resolutions for winding-up the company, and for the appointment of liquidators. The notice calling the meeting was read by Mr. CHAS. HURLBATT.

The CHAIRMAN said it was a matter of the deepest regret to himself that the directors had to call the shareholders together in order to submit the resolution which he had to bring before them; but as the latest news received from the mines stated that the profits were not equal to providing the amount of interest payable on Jan. 1 next, the directors had no other honest course to pursue than declare such to be the fact to the shareholders and debenture-holders, in order that steps might be taken for winding-up of the company. When he referred to "winding-up the company," his earnest hope was that steps might be taken, under the direction of some prudent, and discreet, and wise liquidator so to conduct the affairs of the company as to give a chance for the working of those discoveries, which many people believed to be very valuable, or at any rate to secure to the company the benefit of the assets which were accumulated. The following short report, which he would read, would show that the company was not without funds and resources, but not sufficient to meet the 11,000/- of interest punctually on quarter-day. The report was as follows:—

"The directors regret the necessity for calling this meeting of the shareholders. In November last the accounts received from the mine reported considerable improvement in the returns, both as to the quantity of ore raised and its assay value; and the agent expressed an opinion that this rate of production—64 tons per week—could be maintained for some time. It was not until the 10th or 13th inst. that your directors received unfavourable intelligence, which induced them to issue the notice calling this meeting, for the purpose of proposing that this company be wound up voluntarily. The company's superintendent in Nevada has remitted 6,621. 10s., and there is a sum of 17052. 6s. 4d. at the company's bankers here; but this is not sufficient to meet the debenture interest due on the 1st proximo, and, in reply to a letter from the directors, the superintendent replied that it was impossible to make a further remittance, and that the future prospects were bad. Many of the debenture holders have expressed a strong opinion that the company's property should be more thoroughly prospected, and they are willing to relinquish their interest with the view of effecting that object; and were it possible to obtain the assent of the entire body of the debenture holders, the position of the company would allow the payment, on the 1st proximo, of interest at the rate of (say) 7 per cent., and still leave money in hand to carry on the effectual working of the mine for some time; but in view of the fluctuations in the reports from the mine, which he secured during the past six months, the present unfavourable appearances not encouraging the hope of further returns of bullion, and the inability to pay the full amount of interest accruing on Jan. 1 necessitates, so the directors are advised, that the company be placed in liquidation, and they sug-

gested that the liquidators obtain consent to continue the working of the mines for some further time, and endeavour to reconstruct the company if the majority of the debenture-holders should deem that advisable; but if it was thought best to wind up the company we hope there is still sufficient inducement, from the appearances and the general working, to induce enterprising persons to purchase the property, and the amount which might then be realised, together with the value of the plant and other assets of the company, might make a fund for some further considerable return to the bondholders beyond the 18s. 6d."

He was not aware that he could add much to the information contained in the report. The extraordinary conformation of Mineral Hill was shown by the fluctuations in the weekly returns. On July 6 they worked down to 20 tons per week, next week 20 tons; then next week 17 tons; and in the following weeks, respectively 22 tons, 21 tons, 22 tons, 24 tons, 30 tons, 31 tons, 30 tons, 40 tons, 50 tons, 64 tons, 83 tons, 84 tons, 70 tons, 62 tons, 63 tons, 63 tons, 64 tons, and some of the ore was very rich. So it would be seen that the deposits were such that no man could foretell what the weekly returns might be. It was within the range of possibility that some good opening might be made, and good profits obtained, but the present position of the company was such that it must be liquidated. In conclusion, the Chairman moved—"It has been proved to the satisfaction of the company that the company cannot, by reason of its liability, continue its business, and it is advisable to wind up the same."

Mr. T. APPLETON seconded the resolution, and also expressed his hope that some steps would be taken to further prospect and develop the mine.

The resolution was then put and carried.

On the motion of Mr. APPLETON, seconded by Mr. BALLAND, Mr. W. Turquand (Turquand, Young, and Co.) was appointed liquidator.

The meeting then broke up.

WEST CHIVERTON MINE.

A quarterly meeting of adventurers was held on the mine yesterday, Mr. GLUBB in the chair.

The statement of accounts showed that the labour cost for three months amounted to 5067.; merchants' bills, 2630.; dues, 617.; sundry disbursements, 317.; lead ore, 9673.; blonde, 345.; leaving a balance in favour of the adventurers of 9946. The agents' report stated the 130, west of engine-shaft, on south lode, is opening out an excellent piece of lead ground; for the last 6 fathoms driving it has been worth from 15s. to 40s. per fathom, and the part now being carried in the end is worth 20s. per fathom; and behind this end they are taking down the north part of south lode, which is worth 40s. per fm. The slopes throughout the mine are looking quite as well as anticipated. There are 145 men working in the different levels at prices varying from 4s. 1s. to 7s. per ton, 1s. 6d. men are engaged on outwork.

The agents have reason to hope that the next quarterly returns will be equal to the present. On Thursday the main rod in Hawke's engine-shaft broke, but it is hoped no damage is done to the engine, and the agents say it will only hinder the bottom level for a few days, the water being taken to the new western 50-in. engine. The returns, it will be seen, are 300/- more than the last quarter, and this was considered a very gratifying feature. A portion of the lead credited was up to the day of meeting, and it was resolved to carry a parcel of 372/- to the next account. This, after paying a dividend of 10s., would leave a balance of 8074., the balance from last account being 8500/- odd.

Capt. JULEFF explained that, owing to the better price for lead, they were 240. on the good, but 17s. was charged towards a new boiler.

The PURSER said everything had been charged to the latest moment, but owing to bad weather and the high price of materials the costs had been much heavier than usual.

Capt. JULEFF explained that the two engines had been going at the rate of three strokes per minute only, and the 50-in. engine could work very comfortably six strokes per minute, and so cope with all the water in the mine above the bottom level. Mr. LOAM, the engineer, could see no external damage to the engine, and did not anticipate a very short delay.

During the after dinner proceedings Captain NANCARROW said he had been connected with the mine for 18 years, and no felt as much confidence in it now as he did in the beginning. He was greatly encouraged by the bottom level; it opened out very cheering, and he might say beyond their expectations. In the eastern part of the mine there was a good deal more lead than they calculated upon, and he had not the slightest doubt when they opened out the 140 they would have a fine lode, taking the excellent appearance at the 130. Hawke's shaft was now down to the 140, and they were driving a cross-cut to the level to intersect the lode. Since the last meeting they had driven between 8 or 9 fms., and the western engine-shaft was driven down to the 140, but there was a difference between the two, and they were sinking the engine shaft 2 fms. deeper, in order to equalise the levels and get the water there.

It was stated by Mr. LOAM, the engineer, that from all outward appearances no damage had been done to the engine. It was generally felt there was a good future before them.

WHEAL PEEVOR MINING COMPANY.

The four-monthly meeting of adventurers was held on the mine, on Monday, Mr. T. PRYOR, the purser, in the chair.

The accounts showed a debit balance of 1121.

The CHAIRMAN said the labour cost was charged up to the previous Saturday, and that would better please the out-shareholders than having a month's labour cost in arrears.

Capt. ROGERS then read the agents' report, which contained the following paragraphs:—

We have finished cutting down Sir Frederick's engine-shaft to the deep adit level, and we have also cased and divided the same, and carried out the necessary arrangements therewith for training the mine below the adit level. The last 3 or 4 fathoms sunk in the shaft yielded a very fair quantity of tin, being in some places quite 30s. per fathom. This, with the yield from our tribute pitches, has enabled us to arrive at more definite conclusions than heretofore of the general productivity of the Wheal Peevor main lode. Our sale of tin since the last meeting, principally in the stone, have amounted to 351/-, and we have quite as much tinstinst now broken as we had at the last meeting. We propose to drain off 20 fms. of water, an 1s. 6d. an 1s. 6d. complete the shaft to that depth, as quickly as possible, when we shall probably be able to work pretty much of the extent of the old workings, and probably resume some of the points from whence some of their returns of tin were made. When this work is completed we shall be able to unwater the deeper levels speedily and advantageously. It should, however, be properly understood that in bringing down our engine-shaft we are by no means following the example of the old workers in twisting the shaft sometimes in one direction and then in another to suit the requirements of the moment, and which at last placed them in a position greatly to their disadvantage, but we have carried down a shaft of ample size by line from top to bottom, and shall continue to do so, as to be able to carry out the working of the mine in depth in the best economical manner. At the surface a very first class 50-in. cylinder pumping engine, with two boilers of 11 tons each, has been erected, and is so far completed as to make its first movement to-day in a very satisfactory manner. The engine is of sufficient power to meet all our requirements. The winding engine is employed in drawing the staff from the different shafts, and altogether our plant is in excellent working order. Many of the surface operations have been retarded by the very severe weather during the last two months. We feel quite as confident as we ever did that if the operations of the mine are carried out in a business-like manner—as we intend them to be—that, judging from what we have seen of the lode above the adit level, a good and lasting mine will be found at the bottom.

Capt. ROGERS, in answer to enquiries from Mr. F. Michell and others, stated that he supposed the average size of the lode where it was cut through was from 12 to 14 ft. wide. He had no doubt but that it would be found to be in some places 20 ft. wide. He did not believe that there was a better or more regular and strong tin lode in Cornwall. (Applause.) In fact, it was one of the great champion lodes.

Further questions were asked with respect to the erection of the stamp-heads, to which the CHAIRMAN replied that he expected the axle to be on the mine during the next week, and the stamps would then be erected without any delay. If they had had finer weather since the last meeting their receipts would have undoubtedly been 1500/- more for tinstinst sold. When the mine re-commenced working 8000/- was the estimated cost to set it in working order, and if they made a 10s. call per share that day, as would subsequently propose should be done, that would realise 1500/-, and leave 400/- in hand to go towards working the mine. They had now commenced to fork below the deep level, which was the 52; and considering that they had to contend with increased labour costs and increased price of materials, their estimate was a very good one.

Mr. T. M. HAWKE then proposed, and Mr. R. LOCKETT seconded, the passing of the accounts, which was carried.

Mr. F. MICHELL proposed, and Mr. F. A. RICHARDS seconded, the making of a 10s. call per share, which was also agreed to.

The shareholders afterwards dined together, when numerous toasts were proposed, including "Sir Frederick Williams, the lord of the mine," "Success to Wheal Peevor, coupled with the names of Capt. Rogers, Messrs. Michell and Co., the engineers, and Mr. PRYOR, the purser."

The engine, referred to in the report, was erected by Messrs. F. Michell and Jenkins, of Redruth, and makes the twelfth engine, which they have erected in the county this year.—*Western Morning News.*

TIN VALLEY.—At the meeting on Dec. 18 (Mr. W. Carpenter in the chair), the accounts to the end of November showed a credit balance of 2612. 9s. 1d. A call of 2s. per share was made. Capt. Richard Southey reports that, judging by the surface indications, the lode cannot be many fathoms distant, and when intersected, if it only produces an ordinary yield of tin, it would bring the mine into a paying state at once. The mine has no liabilities, and they have good tin dressing floors, with burning ovens and arsenic chambers, all in complete working order, so that very little tin per month would not only pay working cost but leave a profit.

EAST CHIVERTON.—At a general meeting of the shareholders, on Dec. 19 (Mr. J. Leybourn Goldsmith in the chair), the statement of accounts showed a credit balance of 1392. 15s. 5d. The secretary (Mr. Granville Sharp) said that since the last meeting they had purchased a powerful 50 inch cylinder engine for the sum of 6500.; he was also pleased to say that the company's old 30 inch cylinder engine had been sold for the sum of 5000.; also the old flat rods, for which they had no further use, had been sold for 39s. 2s. 9d., leaving a difference of 104s. 17s. 5d. only, that being the difference of cost between the old engine, incapable of keeping the water during winter, for one powerful enough to enable the mine to be sunk to its present depth. The building of the new engine-house was completed, and the engine partly placed therein, and will, it is expected, be ready to work by the end of January. In reply to shareholders' queries Capt. Southey said he hoped to be ready to start the engine by the end of January, and that the mine would be in working order in about six weeks. The cost for the next four months would amount to about 6000. There is need to be got from the 40 fm. level as soon as the water was out of the mine, lead that the men were compelled to leave last spring, in consequence of the engine being unable to keep the water, although a considerable quantity of lead would be raised, which would assist the costs. He did not expect profits until the 60 was reached, which will take about nine months after they are in fork at the bottom of the mine. The engine recently purchased by Mr. Granville Sharp was undoubtedly a bargain. He (Capt. Southey) had thoroughly inspected it in company with the engineer, and was glad to find it

equal to new. It had done but very little work, and was well worth 1000/- It was powerful enough to enable the mine to be sunk to the 150 if necessary. A call of 5s. per share was made, and a resolution passed that the next general meeting be made special for the purpose of forfeiting shares in arrear of calls.

TRELYON CONSOLS.—At the meeting

profit to the adventurers for many years to come. His best wishes were that it might be so. (Applause.)

Mr. VOX USTRI proposed the health of Mr. Wm. Stevens, of London, and he spoke in high terms of the energy and the liberality which that gentleman had shown in the promotion of this mine, and the confidence which he had in it after making due enquiries. Mr. Stevens had advanced money for the mine to the extent of 3000*l.* He refused to take a shilling back, saying he would have it in shares. The lead ores in that mine ran into Great West Chiverton. They had discovered three fine lodes, four of which were productive of rich silver-lead ore. Why Great West Chiverton had not been a success was simply because it was started upon a rotten foundation. They started with a capital of 1700*l.*, and they all knew how far that would go.

The CHAIRMAN then proposed the health of the agents, Capts. Strickland and Christopher. Both had a stake in the mine, and what they were doing were doing for themselves and families as well as for their fellow-adventurers.

Capt. STRICKLAND, in responding, said that when they got down to the 30 they would get mineral enough to pay their costs. That was, at all events, what they had been told, and he believed the cross-course had never been cut through until the present company took it up. Since they had cut through that they had found a nice bunch of ore there. He would say let them go on quietly till they got to the 30. There was a good lode, he was told, at the 10, but they had never tried it. They thought it wise and economical to get down to the 30 or 40 as soon as possible. He had no doubt that in the eastern part of the mine they would have lead. The several vendors entirely depended upon the prosperity of the mines for their consideration.

Capt. CHRISTOPHER said as far as he had seen of the lodes he was fully persuaded that they should get something when under the adit level that was worth seeing. Since the last engine stopped working, and the shaft ceased to be sunk, a good deal of work had been done in the adit and above it. He found also that the work done under the adit had turned out successful, as far as they got. The last workers had sunk to a depth in some places of 5, 6, and 7 fathoms under the adit, and it paid them well to go as far as they could. This gave them encouragement to go on still further—to extend their eastern levels as well as the west. They were not only looking at the lodes east and west, but at the north lodes that were underlying north and south, which would come together in about 30 fms. under the bottom of the engine-shaft, where the underlie would intersect itself. Ninetimes out of ten where two lodes intersected each other they would make a body of ore. The engine had been put in the very best spot. They were not depending on one, two, or three lodes. They had lodes to the north and the south, which had proved productive so far as they had gone. They had altogether 18 lodes. This company had determined to clear the mine out, and see what was in it, and he hoped they should find everything as they expected to find it.

Capt. STICKLAND: And no doubt it will make a good mine.

Mr. VOX USTRI said he had not alluded to the very great chance they had for tin under their copper. Wheal Kitty's great cross-course ran through Butson in the western ground, underlying east some 30 or 40 fms. below their present shaft, and that was about the usual depth where they found tin in the district. He might challenge mining men to prove that they should not have tin as well as copper and blonde. They had as good a chance of that as any mine in the neighbourhood.

Capt. SAMUEL GEORGE of Redruth, in responding to the toast of his health, said when he came there first to inspect the mine there was some difficulty in getting underground. Looking at the adit level, the works carried on, the nature of the lodes, and the quantity of the mineral that had been taken out at a profit by the old workers, he took it for granted that there was a mine there in depth. He did not write his report entirely upon a first inspection. He was invited to come a second time, and he did so, and he wrote a report which he believed in till that moment. (Hear, hear.) There was, in fact, hardly such a piece of mining ground in this country for extent, or for the number of lodes. They had 18 lodes and three cross-courses; and, looking at the geological formation of the surface, his opinion was that they would have in depth a lasting and profitable mine. He had inspected mines in almost every part of the globe, and when he was called upon to report he did it independently of everybody. (Hear, hear.)

The health of "the directors," "the neighbouring mines," and some other toasts, were given during the evening.

FOREIGN MINES.

CEDAR CREEK (Gold Mines and Water).—Telegram from the superintendent, Mr. T. B. Ludlam, dated Dec. 26: "Raining; Pacific and Union claims running."

CAMP FLOYD (Silver).—Capt. E. B. Wilder, Dec. 6: The mine for November month has in the explorations made shown no new features or any important change of a favourable nature to speak of. No. 3 shaft has attained a depth of 157 ft. to Nov. 30, passing through from 132 ft. deep strata of limestone and black slate, which latter still continues. In sinking vertically a shaft in a limestone foundation we have every reason to suppose that there are a series of veins or bodies of ore, each beneath the other, and separate from each other by layers or bodies of the predominating rock of the district. Each of these veins or bodies of ore met with appears to increase as they descend in a certain ratio in richness, and differing in this respect from legitimate lodes that dip vertically, or nearly so. This is the history of such veins similar to ours in similar formations in countries where shafts have been sunk, as we are doing. I am, therefore, pushing this portion of the work as fast as it can be done, assisted in my letter of Dec. 2 to the company. About 70 ft. from the surface, or from the base of the shaft, we passed through a thick stratum of black slate, then below this quartzite, and next the large vein of low grade ore. I think we will soon be through this slate, and go into the quartzite, and next a large vein of high grade ore.—No. 1 Incline: We are also pushing down the present bottom of the same; it is in quartzite or vein matter, the bottom having been continuous from the surface, but alternating with layers of tin, the ore some days good and others very poor, now down 220 ft. As soon as I can complete the surveys, which will probably be the coming week, with other peculiarities, will be shown on the tracings to be sent you. From the stoves of inclines 1 and 3 we are getting ore, but of a lower grade than formerly, ranging from \$15 to \$25. The expenses for the month just closed, not including some bills for candles, powder, &c., are as follows:—Pay-roll of men, \$5000-85; materials, \$190-64; for mill, &c., \$750-93; making a total of \$6007-42. I find outside of the regular ore channels that the ores are met with in prospecting, and nearly superficial, and do not make down, hence I have confined myself to this channel with its dip, and diminished my force to 42 men. We shall be obliged to purchase 2000 lbs. more quicksilver. The sodium mentioned in your letter has not to date of this been received.

BATTLE MOUNTAIN.—Capt. Richards, Dec. 5: Virgin: A drift has been commenced from the bottom of Daniel's winze to be run north on the course of the lode. The ore that this winze was sunk upon dips in a northerly direction, and although there is no ore at present in this drift I expect we shall shortly strike it. In the 113 ft. level, being driven north, there is no material alteration yet. The 73 ft. north is again producing some very fine stones of red oxide of copper, but the lode is somewhat broken, and the west wall is not so regular as it has been generally: this is probably caused by a cross-course that intersects the lode here. Pierce's stop, in the back of the 113, north of Bluet's winze, is still yielding some good ore. Jack's stop in back of the 73 is producing some very fine ore west of the stop and north near the 37 ft. level. There are 340 sacks raised.

CAPE COPPER.—Returna: Yield from Ookeyip, 575 tons of 35 per cent. from Spectakel, 95 tons of 34 per cent.—Railway: Traffic for fortnight ending Nov. 2, 210 tons up and 461 tons down. The Hondeklip, with 355 tons of ore and 15 tons of regulus, and the Laura, with 313 tons of ore, have arrived at Swansen. Bill of lading is received for 550 tons of ore, per Sec. Farn. The Ocean King, with outward cargo, and to load 600 tons of ore, had arrived at Port Noloth. Since last report the cargo per Hondeklip was sold by private contract as follows:—Half at 14s. 9d. and half at 17s. per unit. (not yet assayed)—50 tons of ore, ex Taena and Galaten, have been put forward for sale by public ticketing on 7th proximo.

MONTE ALBO.—Dec. 15: Driving south from new shaft on course of lode in the No. 6 level, the lode has improved, now producing $\frac{1}{2}$ ton of ore per metre. Driving south in No. 5 level the lode is still poor. Driving south, on course of lode in No. 4 level, the lode is still in a very unsettled state, and poor. Stoops No. 1, in back of No. 5 level, north of new shaft, will produce $\frac{1}{2}$ ton of ore per metre. No. 1, in back of No. 5 level, south of new shaft, will produce $\frac{1}{2}$ ton of ore per metre. No. 2, in back of this level, will produce $\frac{1}{2}$ ton per metre, and No. 3 will yield $\frac{1}{2}$ ton of ore per metre. We resumed sinking new shaft below the No. 6 level yesterday. The lode is 1½ metre wide, composed of stones of lead, quartz, and white iron, altogether of a kindly appearance. We set the Julian Cesar cross-cut at the beginning of the month, to six men, at 44 francs per metre, for 10 metres, but up to date there is no change of any importance.—Napoleon: In the winze sinking in bottom of this level we are now getting into the run of ore ground which we had in the levels above; the lode is 80 centimetres wide, producing $\frac{1}{2}$ ton of good lead ore per metre. The stope in back of Galleria Nuova will produce $\frac{1}{2}$ ton of lead and about 3 cwt. of copper ore per metre. We have had no rain of any consequence, and the crusher is still idle on that account.

LANESTOSA.—Dec. 20: Esperanza: The men have been working irregularly here at the pitches at Caves, and are raising a little ore.—Santa Lucia:

The ore-bearing dolomite bed at the driving incline plane has been opened through for 6 feet thick, and although it is of a promising character it shows nothing of value yet.—Auncion: The men, exploring through old works, have been laid up, and very little has been done; the bottom yields a little lead and calamine.—Glanrafon: The lode in the sinking of Ban de Uno shaft is 4 feet wide, chiefly siliceous rock, with a leader of drusy matter carrying stones of ore. Driving deep adit cross-cut to main lode, is without change, and still in hard flaggy limestone.—Auora: The ground at sinking of Pardo's shaft continues favourable, and we shall soon commence driving through lode.—La Hora: In driving deep adit, the end carries 4 feet of lode, which is hard calcareous spar, with strings of lead. The lode in bottom of sinking of the winze from La Hora is 3 feet wide, yielding good stones of lead, worth 5 cwt. per fm., and promising improvement.

ALAMILLOS.—Dec. 18: The lode in the 60, west of San Rafael shaft, is large and coarse, and does not contain lead enough to value. In the 50, west of San Francisco shaft, the lode is very regular, and appears to be improving, yielding $\frac{1}{2}$ ton of ore per fathom. The lode in the 50, west of La Magdalena shaft, is small and poor. The lode in the 50, east of La Magdalena shaft, has very much improved within the past few days, yielding $\frac{1}{2}$ ton of ore per fathom. In the 50, west of Taylor's engine-shaft, the lode is large, and opening out moderately productive tribute ground, yielding 1 ton of ore per fathom. The 55, east of Taylor's engine-shaft, has passed through the cross-course, and has cut the lode, which is composed of quartz. The lode in the 50, driving east of San Yago shaft, produces stones of lead, worth $\frac{1}{2}$ ton of ore per fathom. The lode in the 50, east of San Victor's shaft, is small, and the ground is hard for driving through. In the 40, west of San Victor's cross-cut (middle lode), the lode is large but unproductive. The lode in the 40, west of San Victor's cross-cut (south lode), is divided into two parts, the north wall bearing a nice branch of lead, yielding 1 ton per fathom. In the 50, west of San Victor's cross-cut, the lode is getting larger, chiefly composed of quartz. The lode has been very productive in the 20, east of Addis' shaft, since last report, and is looking promising at present, producing $\frac{1}{2}$ ton of ore per fathom. In the 20, driving west of Addis' shaft, the lode is split into branches, yielding $\frac{1}{2}$ ton of ore per fathom. There is no improvement to report in the 30, east of Crosby's shaft. The lode in the 40, east of Crosby's shaft, is small but regular. The lode in the 50, east of Crosby's shaft, is disarranged at this end. In the 50, east of Judd's engine-shaft, the lode is small, spattered with lead. The lode is small and poor in the 50, west of Judd's engine-shaft. In the 50, east of Crosby's cross-cut, the stope has disordered the lode. The lode in the 50, west of Crosby's cross-cut, is small, and the ground very hard for driving through. In the 40, west of Morris' shaft, the lode is quite poor.—Shafts and winzes: In Swaffield's shaft, below the 20, the shaft is off the lode. Air's shaft from surface has struck the main part of the lode, which has a promising appearance, yielding 1 ton of ore per fathom. The lode in Romera's winze, below the 50, has failed within the past few days. There is a good lode in the eastern end of Air's winze, below the 30, yielding $\frac{1}{2}$ ton of ore per fathom. The lode in Gea's winze, below the 40, yields good stones of ore, worth $\frac{1}{2}$ ton per fathom. Good progress is being made in Lucio's winze below the 20. The lode in Roberto's winze, below the 40, has fallen off in value, and the ground continues very hard.

FORTUNA.—Dec. 18: Canada Incoosa: The lode in the 110 fm. level, driving west of Henry's shaft, is disarranged, and unproductive at present. The lode in the 100 fm. level, west of Judd's shaft, has diminished both in size and value in the past week, now yielding $\frac{1}{2}$ ton of ore per fathom. The ground is hard for driving, and the lode small and poor, in the 80 fm. level, east of Henry's cross-cut. The lode in the 60 fm. level, east of San Pedro's shaft, is of a promising appearance, yielding $\frac{1}{2}$ ton of ore per fathom. The 60 fm. level, west of San Pedro's shaft, the lode has declined in value. In the 60 fm. level, west of San Pedro's shaft, although still of a promising appearance, is not so productive as it was, now producing $\frac{1}{2}$ ton of ore per fathom. The 90 fm. level, east of Addis' shaft, is a strong lode, with lead disseminated through it, but insufficient to value. The lode in the 50 fm. level, west of Lownde's shaft, is large, and spattered throughout with lead. There is some unsettled ground in advance of the 90 fm. level, west of Lownde's shaft; the lode yields $\frac{1}{2}$ ton of ore per fathom. The lode in the 90 fm. level, driving east of Lownde's shaft, is disarranged, and unproductive. The lode in the 50, east of Caro's, is divided into branches, and the granite is in an unsettled state.—Shafts and Winzes: The lode in Kennedy's shaft, below the 70 fm. level, is large, consisting chiefly of carbonate of lime and stones of ore, yielding $\frac{1}{2}$ ton of ore per fathom. San Frederick's shaft, below the 50 fm. level, is off the lode, and the granite rather hard for sinking. Caro's winze, below the 90 fm. level, is down to the 100 fm. level, and will be holed by the end reaching it shortly. The lode in Jorge's winze, below the 50 fm. level, contains spots of lead.—Los Salidos Mine: In the 110 fm. level, west of Buenos Amigo's shaft, there are two compact branches. The lode in the 100 fm. level, west of San Carlos shaft, is very small, and the ground hard. There are two branches in the 90, west of San Carlos shaft, each carrying a little lead. The lode in the 110 fm. level, east of Morris's engine-shaft, is large and open, and letting out water freely, yielding 1 ton of ore per fathom. The 100 fm. level, east of San Pablo's shaft, although not so solid as it was, is still opening a splendid run of ore ground, yielding 4 tons of ore per fathom. The driving of the 90 fm. level, east of San Miguel's shaft, is resumed. The lode contains stones of ore. The 25 fm. level, west of Palgrave's shaft, is still in old work, with branches of lead standing in the side of the level. The lode in the 35 fm. level, west of Palgrave's shaft, is compact, regular, and solid, yielding 2 tons of ore per fathom. The 35 fm. level, east of Palgrave's shaft, is being driven south, but up to date no lode has been met with.—Shafts and Winzes: The lode in Morris's engine-shaft has failed below the 110 fm. level, and is now small, with occasional stones of ore. In the eastern part of Palgrave's shaft, below the 35, there is a fine stone of ore, yielding 1 ton of ore per fathom. The lode in Mariano's winze, below the 100, is very regular, composed of quartz and lead ore, yielding of the latter 1 ton per fathom. The lode in Julian's winze, below the 100 fm. level, has diminished in value a little, yielding 1 ton of ore per fathom. Roman's winze, below the 90 fm. level, is going down in a rich shoot of ore, yielding 4 tons of ore per fathom. There are small veins of ore in Puerto's winze, below the 25 fm. level, but not enough to value. The raisings were well sustained in the past month, and the stopes are doing moderately well at present. All surface operations are going on very regularly, and the machinery is in good working order. We estimate the returns for December at 350 tons.

LINARES.—Dec. 18: The lode in the 85 fm. level, west of Crosby's shaft, is large and strong, and yielding good stones of ore, worth $\frac{1}{2}$ ton per fm. In the 75 fm. level, west of Crosby's shaft, the lode is small and the ground hard for driving. The 75 fm. level, west of San Francisco shaft, is opening up good tribute ground, yielding 2 tons of ore per fathom. The lode in the 75 fm. level, east of San Francisco shaft, is declining in value, yielding $\frac{1}{2}$ ton of ore per fathom. In the 65 fm. level, west of San Francisco shaft, the lode is small and unproductive, consisting of carbonate of lime and lead ore, yielding $\frac{1}{2}$ ton of the latter per fathom.—Los Saltos Mine: The lode in the 65 fm. level, west of Taylor's engine-shaft, is compact, showing indications of improvement. The ground is hard and the lode unproductive in the 65 fm. level, east of Taylor's engine-shaft. The lode in the 55, east of Taylor's engine-shaft, is disordered, having passed through a small cross-course. In the 45, east of Addis' shaft, the lode is large and strong, composed of quartz and lead ore, yielding of the latter $\frac{1}{2}$ ton per fathom. The 45 fm. level, west of San Carlos shaft, is a strong, open lode, yielding good stones of lead ore. The lode in the 55, west of San Carlos shaft, is large, consisting of quartz, decomposed granite, and lead ore, yielding $\frac{1}{2}$ ton of lead ore per fathom. The lode in the 55, east of San Carlos shaft, is compact and solid, presenting a very kindly appearance, yielding $\frac{1}{2}$ ton of ore per fm. In the 45, east of Judd's shaft, the lode is poor and the ground very hard for driving through. The 32, east of Judd's shaft, is opening up a good length of valuable tribute ground, yielding 4 tons of ore per fathom. The 45 fm. cross-cut, south of Henry's shaft, is being pushed on as fast as possible.—Shafts and Winzes: The men are preparing to fix a plunge-lift in Taylor's engine-shaft, below the 65 fm. level, yielding $\frac{1}{2}$ ton of ore per fathom. Good progress is being made in San Carlos shaft, below the 85 fm. level, considering the hardness of the ground. Good dispatch is also being made in Cox's shaft, below the 45. We have commenced the sinking of Addis' shaft, below the 45 fathom level, which will be pushed on as fast as possible. Luca's winze, below the 32, is going down in an open, productive lode, worth $\frac{1}{2}$ tons per fathom.

[For remainder of Foreign Mines, see to-day's Supplement.]

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—Simon Toy, Dec. 24: The end which we are now driving eastward from the rise in the back of the deep adit level is worth 1½ ton of lead per fathom. No. 2 adit is driving eastward from the rise, and is 4 fms. east of the winze. The lode is $\frac{1}{2}$ ft. thick, and is worth 1½ ton of lead per fathom. I have taken the men from the east part of the set for a few days, and have put them to work about the dressing floors, in order to finish them as soon as possible, and they are making good progress with them.

BAMPFYLDE.—S. Mitchell, Dec. 23: The lode in the 102 west is worth fully 1 ton of rich copper ore per fathom; ground improved, and easy for dispatch. The various stopes in the back of this level will average over 15 cwt. of copper ore per fathom. We have also a very promising lode in the 90, driving west of same shaft, and in driving south we have discovered the south part, where we shall in all probability meet with an early improvement for copper ore. The winze sinking below the 102 is down within about 5 or 8 ft. of the 112: this when completed will not only drain the lode to the 112, but will ventilate the mine throughout. No. 2 winze, below the same level, is going down satisfactorily through copper ore; the men are now cutting through the lode in the 80, east of No. 4 shaft, and have driven through it 8 ft., and have not yet discovered the south wall. Judging from general indications, the characteristics of the lode, &c., we have every reason to believe that a discovery of something very important will be met with here. We are also cutting into the same part of the lode in the 70 above, east of the shaft, where we have already discovered some splendid yellow copper ore, and we hope to be enabled to report more fully on the lode in this mine next week. We have cleared and secured the eastern adit to the extent of 8 fathoms during the last three weeks; the lodes here are very large, the south one is fully 6 ft. wide, and the north one is 5 ft. wide, and are precisely similar in character. They are composed of gossan, quartz, and iron, and are spotted throughout with rich copper ore. In all my experience I never saw a lode of greater promise for making a large deposit of copper ore. A little more depth only is required to attain this object. Judging from what we can see, there are 4500 fms. of backs of ore ground, all high and dry, which can be operated upon immediately. We have 34 men engaged in this part of the mine. I can see my way clear now to haul and discharge all the stuff from the No. 4 shaft at surface, and would advise the directors to give me instructions to do so, as it will effect a considerable saving to the company. The iron part of the mine is being pushed forward very satisfactorily. At Crawborne the lode seemed to be a little disordered for a day or two by a sparry cross-course passing through it, but it has now disappeared. We are bringing in another stop on No. 1 lode at the Stowford part of the mine, which will facilitate our raising the iron ore. No. 2 lode, at this part of the mine, never looked so well as at the present time.

—S. Mitchell, Dec. 24: The men have just come up from underground, and informed me they have blasted a hole in the cross-cut in the 80 east of No. 4 shaft, and have discovered some splendid silver-grey ore, specimens of which they brought up, and should think that better or richer quality was never before found here.

BEDFORD CONSOLS.—G. Rowe, J. Mitchell, Dec. 24: The 12 is being pushed west of shaft towards the cross-course as fast as possible; there is no change in the lode as yet to call forth any remark since last reported on. The lode in Smale's winze continues much the same, being about 4 ft. wide, containing an abundance of mundic, peach, capel, and good stones of copper ore—a kindly lode. The north lode in Woodley's winze is about 20 in. wide, composed of spar, mundic, white iron, and some rich black and yellow copper ore now in the bottom of the winze, but not enough to value; we hope, however, from its kindly appearance to find it improved as we go down. All the machinery is working well.

BEDFORD UNITED.—William Phillips, Dec. 21: The lode in the winze from the 103 east is further improved, now

lode is 2 feet wide—poor. In the 220 end west the lode is $1\frac{1}{2}$ ft. wide, unproductive. In the winze sinking below the 210 east the lode is 1 ft. wide, worth 5/- per fathom for tin. In the 210 end east the lode is $2\frac{1}{2}$ ft. wide, unproductive. In the 210 end west the lode is 4 feet wide—poor. Blewitt's Shaft: In the 200 end west the lode is 2 feet wide—poor. Richard's Shaft: In the 180 end west the lode is 5 feet wide, unproductive. In the 170 end west the lode is 3 feet wide, having a kindly appearance. Yates's Shaft: In the 95 end west, on the north lode, the lode is 2 feet wide, yielding a great deal of muriatic. There is no change in either of the cross-cuts since last advised. There are employed on the mineson work, 126 men; on tribute, 27 men and six boys; at surface, 39 men and eight boys: total, 192 men and 14 boys.

CWM ELAN.—W. Goldsworthy, Dec. 21: The 10 fm. level, east of engine-shaft, has improved, and is producing good stones of lead ore. The lode is looking very favourable for a further improvement. The lode in the 10, west of engine shaft, is looking very promising, yielding from 6 to 8 cwt. of lead and blonde ore per fm. No. 1 stop in back of deep adit level is now producing from 12 to 15 cwt. of lead and blonde per fathom; also No. 2 stop, from 20 to 23 cwt. of lead and blonde ore per fathom. The lode in the 2 shallow adit level is from $2\frac{1}{2}$ to 3 ft. wide, and is composed of capel, lime, spar, and blonde—of the latter not sufficient to value. The lode, I must say, is of a very kindly appearance, and is discharging more water. The masons have nearly finished the walling for the stone-breaker; the machinery is working well.

CWM BYCHAN.—Thomas Williams, Dec. 20: We are getting on first rate. I suppose we have out from 10 to 15 tons of lead ore to surface, and plenty ready cut. I have put men to waggon it out morning, noon, and night. I have 18 men working upon the lead ore—all miners; also the men driving the cabin level.

DEER PARK.—John Bucknell, R. Taylor, Dec. 21: In the engine-shaft we have driven the bottom cross-cut 7 ft. from last date, making in all 2 fms. 1 ft. And in the 30 we have driven a further 6 ft. west in the lode, which is greatly improved since we cut through it, and there is every indication of further improvement. Deep adit also driven 5 ft. more; no change to notice. We have eight men stoking the lode in back of level. The stamps are working well. We trust the weather will continue dry, that we may make greater progress with our surface operations. 50 men employed on the mine.

DENBIGHSHIRE CONSOLIDATED.—Dec. 26: Upon making a trial of the ore at the incline in the 75 the lode improved; it is now 3 ft. wide, and when we are able to explore it properly will produce fully 1 ton of lead ore per fathom for 4 or 5 yards in length. I need not call your attention to the discovery likely to be made when we reach the runs in the 112 fm. level. Everything is going on most satisfactorily.

DEE BROKE.—Wm. Michell, Dec. 20: The 25, to drive east of western or No. 1 shaft, on the main lode, set to six men for one month, at 8/- 10/- per fathom. The part of the lode as carried on this level for 5 ft. wide is worth 10 cwt. of lead ore per fathom, and we are leaving a part of the lode standing on the south side. The shallow level to drive east, on the main lode, set to four men, at 6/- per fathom, for one month. The part of the lode taken down in this level is 3 ft. wide, composed of gossan, spar, and occasional spots of lead ore, but sufficient to value. The 25, to drive west of eastern or No. 3 shaft, on canter lode, set to six men, for one month, at 10/- per fathom. The lode is 5 ft. wide, strong and regular, letting out a great deal of water, and composed of clay-slate and spar, with small branches of lead ore, producing saving work. By present indications we may reasonably expect an early improvement. Our machinery is all in good working order.

EAGLEBROOK.—Henry Tyack, Dec. 24: The lode in the end going north-east in the 20 is not so productive as it was when I last wrote to you, being at present about 2 ft. wide, containing spots of lead, but not sufficient in quantity to save for dressing. The stop in the back of this level continues to yield its usual quantity, about 10 cwt. of lead per fathom. In the extension west of the stop the lode will produce upwards of 15 cwt. per fathom. In the stopes in back of the 40, west of shaft, the lode is producing about 15 cwt. of lead and copper per fathom. Since my last report we have taken down the lode in the 50 east, and find it to be about 5 ft. wide, containing nice branches of copper, yielding about 10 cwt. per fathom. It also contains lumps of blonde and spots of lead, but not sufficient of the latter to save for dressing. The 40 cross-cut south has been extended about 5 fms., but we have not as yet met with anything of importance. The ground in the fore-breach is of a light clay-slate, and letting out a little water. We have now cleared about 90 tons of copper, 6 tons of lead, and 2 tons of lead in course of dressing.

EAST BALLESWIDNEY.—T. Trahier, Dec. 25: Since my last report the men in the adit level have cleared and secured 4 fms. The men in Morgan's engine-shaft are progressing very satisfactorily. The carpenters are busy at work putting in round bouldles and frames. I hope to get one of the bouldles to work in a few days. I am glad to say the stamps are working well, and second to none in the country: the other parts of the mine are just as last reported.

EAST DARREN.—Dec. 24: Taylor's Shaft: In the 116 east the lode has become small, and disordered by cross joints, being composed of a dark clay-slate, carbonate of lime, containing spots of lead, and at the present moment is looking a little more promising; we hope soon it will become more productive as we advance from the cross measure of ground passed through. In the 104 east the lode is about 1 ft. 6 in. wide, composed of a dark clay-slate, carbonate of lime, unproductive for lead, being still in a broken up and disordered piece of ground. In Skinner's shaft, sinking under the 92, the ground is mostly composed of a dark clay-slate and beds of grit—either stiff for progress at present, ground little easier for sinking. New Engine Shaft at Blaenewy: In the 20 east the lode is about 2 ft. wide, chiefly composed of a dark clay-slate, carbonate of lime, and containing spots of lead, but not sufficient to value. In the 60 west the lode is about 1 yard wide, chiefly composed of a dark clay-slate, carbonate of lime, and flocks, containing small spots of lead occasionally; the lode at this point is becoming larger and stronger, and we shall extend this level west with all possible speed to prove the runs of ore ground taken away in times past from the adit level and below. In the 40 east the lode is becoming a little larger, now 1 foot wide, chiefly composed of a clay-slate, carbonate of lime, and decomposed quartz, containing occasionally small spots of lead, but not of any value. The tribute pitches throughout the different levels are without change to notice, yielding their average quantities of ore. We have been repairing our small boiler by putting in four new plates, which is now completed, and put to work. This, with all the other machinery, is in good working order. Our drawing and dressing, with our surface work, continue to progress regularly. We have to day sampled 50 tons of silver-lead ore.

EAST NANT-Y-MWYN.—R. Trenthim, Dec. 23: Since my last we have had little else but rain, and it has been sadly against us in our surface operations. Our new shaft is down 4 fathoms from surface in very tough ground, and a little water, I suppose, from so much wet weather. The lode west, on the Cornish lode, is large and fine looking, with spots of lead occasionally in it. The wheel and pitwork have all arrived at Llanwelly station, and a great portion of it is up to Nant-y-Brain, waiting dry weather to bring it on to our mine, and which we hope will soon set in.

EAST POLPERRO.—Wm. Johns, Dec. 24: The blonde lode up to the western end continues to improve, and we are prepared to drive on the same lode eastward, where we expect to make good work. We have a large quantity of tin and copper broken from the stopes on the counter lode, and the floor is ready for dressing and separating the same. The collaring up of the western shaft is proceeding, and by the time it is finished the wheel will be up, when we shall drive on the counter lode to intersect the 200 south lode.

EAST WHEAL GREENVILLE.—E. Hawking, Wm. Bennetts, Dec. 26: The lode in the 120 west is worth for tin and copper 7/- per fathom. The ground in the 120 cross-cut is favourable for driving, and the men are making fair progress. The winze below the 110 west is worth 6/- per fathom. The 95 east is without change. The stop above the 65 east is worth 2 tons of copper ore per fathom. The lode in the 55 east is worth for tin and copper 12/- per fathom. The winze below the 85 is worth 15/- ton of copper ore per fathom. The stop above the 55 is worth 2 tons of copper ore per fathom. The winze below the 75 is worth 2 tons of copper ore per fathom. The lode in the 65 east no lode has been taken down since our last.

EXCELSIOR.—G. Rickards, Dec. 15: Saturday last was our pay and setting day, when the following bargains were set:—The south adit level to drive west towards the new shaft, by 4x men, at 9/- per fm.; stoned four weeks; the ground is without change calling for any remark. A new stop in the back of middle adit, west of white shaft on Thorn lode, to four men, at 3/- per fm.; lode worth for tin 10/- per fm. We have commenced active operations in order to get ready the necessary appliances for making the produce of the mine marketable. One of our directors who has lately been at the mine has purchased from Mr. Bayley, on very advantageous terms, a large water-wheel, which stands in our set in a good position with respect to the workings. We have six men engaged in preparing the ground necessary for the erection of stamps and dressing floors, and every effort shall be made in order to get the same completed as soon as possible, so as to go into the market with a profit at the earliest date.

FRON VELLAN.—Capt. Harper, Dec. 24: We have cut into the hanging wall of the lode in the forebreast of the western level, and have now put the men to cross-cut south to prove a part of the lode that has split off into the south side. The lode is full 12 ft. wide, of a very promising appearance, and will produce fully 20 to 35 cwt. per fathom of lead ore. The great quantity of water in the rise, by percolating through the joints, has loosened the ground in the sides of the shaft in several places, therefore we have had to timber it, and the risemen have been employed in so doing the whole of this week, therefore nothing has been done in the level west of the rise.

GAWTON COPPER.—G. Rose, G. Rose, F. Clynn, Dec. 21: The part of the lode carried in the 105, east of King's engine-shaft, is 8 ft. wide, which is principally composed of capel, spar, and muriatic, intermixed with good stones of ore. The lode in the rise in the back of the 105 is yielding 5 tons of ore, worth 12/- per fathom. The lode in the 95, east of said shaft, is still showing a very kindly appearance. The lode in the 95 east is looking well, yielding 10 tons of ore, worth 10/- per fathom. The lode in the winze, sinking below the 75, is worth 25/- per fathom. The lode in the rise, and stop in the back of the 70, is worth 15/- per fathom. The lode in the 70, and stop in the back of the 75, is worth 15/- per fathom. All other points of operation are without change. We have a fracture in the main beam of our pumping-engine, which is now undergoing repair, and will be restored quite equal to new by mid-December.

GORSedd AND CELYN LEVEL.—Dec. 26: East Gorsedd: I have to report that our labourers are looking quite as well as reported, and the men are breaking exceedingly rich ore. From the appearance of the cross-cut to the Merlin's vein I am expecting very fast to intersect it. The adit level is looking better, and containing more spots of lead ore than we have seen for some time.

GREEN HUIRTH.—Wm. Vipond, Dec. 14: Since the last annual report, we have driven the new shaft end 19 fms., cross-cut west from this 5 fms. 5 fms., driven on the east branch 11 fms., 4 fm., and worked from the sides, roof, &c., including working by west cheek, 15 fm. 2 feet; this has been the productive part of the mining during the year, in fact has raised all the ore worth naming, and it has all come from the vein and branches in less than 20 fathoms in length. We have driven on old vein 2 fms. 3 feet, risen 1 fm., 4 feet, sunk 2 fathoms 2 ft., driven and cross-cut 8 fms. 6 in. on cross vein south, driven Annie's vein 2 fms. 5 ft.; this all yielded a little ore, but barely sufficient, I should think, to pay costs. These workings are too near the top of the limestone. In Annie's vein the limestone is all below on the west cheek. There is better ore in the bottom, both in Annie's vein and the cross vein south, than we got in driving. We have driven the north end 15 fms. 2 ft. 6 in., and cross-cut from the end east 12 fms., but see no signs of anything yet. We have cut out turnball for incline 3 fms., and driven 1 fm. 3 feet. We have driven the low level 33 fms. 3 feet; this is now 42 fms., gone from where we began. We have ballasted the middle level, and now draw the work by horse; this is making considerably difference in the quantity of work got. The outside work has been principally making the railway from Crookhorn to Halton Hurl, and the road from there to the mine. The weather has been seriously against this all the season, but it is so far advanced that it will very soon make into a good road to the mine, and lay the railway off altogether. The railway can be made into a road without horse work at all, and ought to be done as soon as winter is past. We have sent to market 1124 bings (8 cwt.) of ore, and delivered 113 bings 6 cwt., for dues or rent. We

have 50 bings more dressed, 100 bings in house, and stuff laid aside for crusher. The vein in new south end is about 9 feet wide at present, and good ore left in the bottom of all the ground we have driven over this year. The incline we have commenced will give the readiest access to this and also to the sole of the cross vein south, the east branch and Annie's vein as well. The mine is producing at present I should say something like 30 to 35 bings of ore per week, but as the bargains are on Monday, I shall send you the prices and value of each working by Tuesday's post, which you can annex to this as a postscript.—Dec. 16: P.S.: At the bargains to-day, the new south end was set to four men to drive, 75s. 6d. per fathom, side and roof at 44s. 6d. per fathom of 144 square feet; this is worth 15 tons of ore per fathom. The working by west cheek, worth 2 tons of ore per fathom, is set to two men, at 70s. per fathom. The east branch, worth 31/2 tons of ore per fathom, is set to two men to drive at 84s. per fathom, roof at 50s. per fathom. The stop, worth 2 tons of ore per fathom, is set to two men, at 42s. 6d. per fathom. The cross-cut from north end is set to two men, at 55s. per fathom, and the incline is set to four men to drive at 61s. 6d. per fathom. Two men are preparing for sinking, and shall set them a bargain in a day or two. The low level is set to drive by four men, and will put up the air-pipes, at 75s. per fathom. The washer and lad are doing some odd jobs inside at present, and we have two more lads breaking up the rough work as it comes out. Two men are also clearing up the old level below the shop driven into Padin's strings; we shall very soon have this opened up to where the strings have been cut. Six bings of ore have gone to Alston to day, making 1130 bings to market, to this date, for the year.

—W. Vipond, Dec. 20: Since writing the report of the bargains there is no material change. The mine is certainly as good as them reported. I have set two men a bargain to sink at 75s. 6d. per fathom.

GREAT MOUNTAIN.—John Fraser, Dec. 26: I am sorry to say that on Tuesday morning one of our crushing rollers broke. I have had our other pair of rollers made ready. We shall start again on Saturday morning. Notwithstanding the damage we have got about 9/- tons of lead made ready for the market. The No. 1 new cross-cut is within 4 fms., to come under the sink. That is why we may call one month's work from now. The stop at No. 4 is looking as well as ever. We are in with the new deep adit on 10 fms., and are pushing on as fast as we can, and, from the appearance of the stop at No. 4, our prospect with this adit is very good.

GREAT NORTH CARADON.—G. Rickard, Dec. 23: In the immediate bottom of the engine-shaft there are strong indications of a favourable change in the ground. The north lode is small, but very kindly, producing good stones of lead ore and can: rapid progress is being made in opening on this lode.

GREAT RETTALLACK.—John Harris, Dec. 21: The ground in the adit end east is a little easier for driving than last reported on, and the lode is producing good stones of ore.

GUNNISLAKE (Clitters).—Wm. Skewis, John C. Secombe, Dec. 24: The lode in the 152 fm. level east is producing saving work for copper; the lode in this level west is worth 7/- per fathom. The lode in the 140 fm. level east and west is producing saving work for tin; the lode in the rise in the back of this level east of engine-shaft is worth 4/- per fathom. The lode in the 128 fm. level west is worth 8/- per fathom; the stop in the back of this level is worth 5/- per fathom. The lode in the winze in the bottom of the 116 fm. level, west of the lode in the 140 fm. level east and west is worth 8/- per fathom; the lode in the stopes in the back of this level is worth as follows: No. 1, 9/-; No. 2, 11/-; and No. 3, 7/- per fathom. The lode in the stopes in the back of the 92 fm. level east of engine-shaft is worth—No. 1, 8/-, and No. 2, 9/- per fathom. We regret that the leakage of the working in the bottom lift will interfere with the present pumping.

MARKE VALLEY.—J. S. Secombe, J. Stenlake, Wm. Hosking, Dec. 20: There is no particular change in any of the workings, excepting in the 100 fm. level, few fms. of old engine shaft, when the lode will yield 5 tons of copper ore per fathom. We have commenced stamping tinstuff.

MELLANEAR.—E. Rogers, Dec. 23: I am pleased to say that the mine never looked so well as it is at present. It will be remembered that the lode in the 86 end, which is suspended for a short time, is worth from 3 to 4 tons of ore per fathom. In the back of this level we are rising by the side of the lode for ventilation and a more speedy way of taking away the ore, and judging from what we can see of the lode we have every reason to believe that the lode is quite as productive as it is in any part of the level above. In the 78 the part of the lode carried (about 5 feet) is worth about 9 tons of ore per fathom, and we cannot tell the whole size of it. We have now driven in this level more than 40 fathoms in length, through a lode worth fully 8 tons of ore per fathom on an average, and in the present end the lode looks quite as promising for continuance as it did in any part of the driving. Four stopes in the back of this level are worth from 7 to 8 tons of ore per fathom each. In the 66 we have got into the course of one; the lode in the end is now worth 8 tons of ore per fathom. We have set a winze in the bottom of this level close to the present end, where the lode is also worth 5 tons of ore per fathom; we expect to hole this place with the eastern stop, in the back of the 78, in about a fortnight, and as soon as this is done, and the rise in the 86 is put through to the 78 west, we expect to very nearly double our returns. The engineers are engaged in putting in the large engine at Gun-try's shaft, and every effort will be used to get the whole completed in the time mentioned in my last report. Our pumping-engine is going 10 1/2 strokes per minute, which we can very well manage if all goes well.

MINERA UNION.—J. Nicholls, Dec. 26: I have no change worthy of remark in any of the bargains since last report.

NEW CROW HILL.—T. Treloese, Dec. 24: At the 35 winze we sunk last month 3 fms., besides securing. The 35 is re-set to six men, at 15s. per fathom; the lode is still fully 2 ft. wide, with spots of lead ore in places. I fully expect a change for the better here in the course of a week or two, as we have a branch 2 ft. south of the main lode that we are carrying down with the winze; it is thickly spotted with lead ore, and will drop into the lode in about 6 ft. further sinking. The 45 east was set to drive by two men, at 7/- per fathom, stent 1 fathom.

NEW DOLCOATH.—J. Vivian, Son, N. Clynn, Dec. 26: We have no particular alteration to report this week, but on the whole our prospects are a shade better.

NEW FOLYNT.—W. H. Martin, Dec. 26: In the 150 (the bottom level) is in fork. We have now to clear up a few feet of sand in the bottom of the sump-shaft, which is 10 feet below the 150, to clear away the side lifts used in forking, and to prepare for sinking the sump. In the 140 east end Martin's lode produces occasional stones of tin. In the 140 west end Martin's lode is worth 12/- per fathom. In the 130 west end Martin's lode is worth 12/- per fathom. In the 120 west end Martin's lode is worth 12/- per fathom. In the 110 west end Martin's lode is worth 12/- per fathom. In the 47 east end Skinner's north lode is worth 6/- per fathom. In the 47 west end Martin's lode is worth 12/- per fathom. In the 90 east end Martin's lode is worth 10/- per fathom. The stops in the back of these levels are worth about 10/- per fathom. The No. 4 winze sinking below this level, on the east part, is suspended, and the men will in a day or so be put to work south of No. 3 winze; lode worth 10/- per fathom. Other places much the same as last reported. We sold on the 18th inst. two parcels of silver-lead ore: No. 1, 20 tons to Messrs. Sheldon, Bush, and Company, at 28/- 9s. per ton; No. 2, 6 tons to Messrs. Sims, Willyams, and Company, at 15/- 3s. 6d. per ton.

PARYS MOUNTAIN.—T. Mitchell, Dec. 26: We have nothing of importance to report in the tertiaries. The 90 cross-cut south is progressing favourably, in a stratum of ground of the most promising character for the production of mineral. The stopes in the 80, both east and west of the cross-course, are yielding very well, and the ore at present is of a better quality. The stopes in the 65 continue to yield much the same as for some time past. The tribute pitches are without change, excepting two points which have improved within these last few days. The White Rock shaft is now communicated with the adit level, and the water drained off from the shallow workings. At Morfaud we have cleared out the bottom level to the forebreast, and also opened a portion of the old blue stone workings, and discovered some good ore ground. We purpose on Saturday next, setting day, to let a bargain to raise blue stone.

PEDN-AN-DREIA UNITED.—Wm. Tregay, Wm. Pridgeaux, J. Pope, Dec. 21: Sump: The 150 (the bottom level) is in fork. We have now to clear up a few feet of sand in the bottom of the sump-shaft, which is 10 feet below the 150, to clear away the side lifts used in forking, and to prepare for sinking the sump. In the 140 east end Martin's lode produces occasional stones of tin. In the 140 west end Martin's lode is worth 12/- per fathom. In the 130 west end Martin's lode is worth 12/- per fathom. In the 120 west end Martin's lode is worth 12/- per fathom. In the 110 west end Martin's lode is worth 12/- per fathom. In the 47 east end Skinner's north lode is worth 6/- per fathom. In the 47 west end Martin's lode is worth 12/- per fathom. In the 90 east end

of the flat-rod shaft, is looking a little better, now $2\frac{1}{2}$ ft. wide, and worth 13/- per fathom. We are cutting a plat to the west of the shaft, and hope to finish it by the end of next month, when we shall extend the 16 fm. level west under the old men's workings. Our tribute pitches are much the same as for the past month.

SOUTH CONDURROW.—J. Vivian and Son, H. Abraham, Dec. 24: The 82, west of King's shaft, is worth about 40/- per fm. The 71, west of King's shaft, is worth about 80/- per fm. The No. 2 winze, sinking under last-named level, is worth about 70/- per fm. In the 61 cross-cut north, west of King's shaft, the part of the lode through which we are cutting is worth about 15/- per cubic fathom. The winze sinking under the 61, west of Vivian's shaft, is worth about 25/- per fm. In the 51 east and west of cross-cut, west of King's shaft, the lode is worth about 12/- per cubic fathom. The 10, east of new shaft, is worth about 8/- per fm. In the shallow adit, east and west of Plantation shaft, the lode is 1 foot wide, worth about 8/- per fm. In the deep adit, east of engine-shaft on the middle lode, the lode is $1\frac{1}{2}$ feet wide, and worth 8/- per fm. There is nothing to remark on at the other points of operation. Our engines and other machinery are working well; the rate of working of the pumping engine is being now about 4 $\frac{1}{2}$ strokes per minute.

SOUTH GREAT WORK.—S. J. Reed, Dec. 24: In the 20, west of engine-shaft, the lode is 2 ft. wide, containing rich stones of tin, and the lode regular and well-defined. The 10 has been driven more than 20 fms. beyond the 20 end, and the lode is 3 ft. wide, worth 11/- per fathom. The flat-rod shaftmen are still engaged about the bob-pit, and several other men about work connected with the new line of rods, so as to get them to work as expeditiously as possible.

SOUTH MERRILYN.—Dec. 26: In am pleased to say that the lode at the 120, driving south from bottom of sump, is 3 ft. wide, worth 12 cwt. of lead ore per fathom. No other change.

SOUTH PLYMMON.—John Walters, Dec. 26: The 40, driving west on the course of the lode, is extended 24 fms. 3 ft. 6 in.; the men have been engaged stripping down the lode for the last two or three days; so far as this is principally composed of quartz, capel, and mungle, and I am pleased to say that for the last 2 fms. in driving we have met with some very beautiful branches of spar, which have a very kindly appearance, with a well-defined wall to the north part of the lode; the water still continues to issue very strongly from the lode and is very troublesome for the men in taking down. We have still more lode standing to the south. I hope to get the 9 in. lift to work by Saturday evening next if the weather continues favourable; after which the men will strip down the lode to its full width, in order to prove its size and value. The 49 cross-cut north is extended 7 fms. 1 ft. 6 in.; the ground is just the same as for some time past. No other change to notice.

SOUTH ROMAN GRAVELS.—J. W. Powning, Dec. 26: Shelfield Engine Shaft; In taking down on Friday night we met with a very strong feed of water, which filled 27 ft. of the shaft in eight hours. We started on Monday morning to drop our driving-lift, and got it fixed and at work by Tuesday noon; the sinking is again being pushed on with all speed. We have just blasted down a piece of lode in the bottom of shaft, which I am glad to say looks equal to any previously taken down, being now worth fully 1 $\frac{1}{2}$ ton of lead ore per fathom, and presents every evidence of the shaft having entered a run of ore; I am of opinion the lode will further improve as depth is attained. The engine, with pitwork attached, works very satisfactorily, and keeps the water at six strokes per minute. The deep adit across west, towards Roman lode, is being pushed on as fast as it is possible; no change to note.

SOUTH WARD.—Thomas Foote, Dec. 23: We have communicated the rise in the back of the 69 south with the winze in the bottom of the 49, which has given good ventilation. The shaftmen that were in the rise are placed to cut down more ground in the western part of the shaft for tramroad; as soon as this is done (which will only take a few days) we shall sink the engine-shaft 6 ft. for trip-plat, as we must lay tramroad at the 69 before commencing stoning the backs: so as to get away the stuff. The rise in the back of the 69 north has reached the south part of the slide, consequently the lode is not looking so well; but, judging from the lode in the winze coming down on the slide, we may look for an improvement; as we get clear of this south part of the slide good progress is making in rising. In the winze sinking in the 39 north, and which is down over 11 fms. through a good paying lode, we have met with the north part of the slide, consequently the winze is not producing any ore at present. You will see that both rise and winze are in the slide. The winzemen in the 49 south have been put back since hoisting to the 40, which has been suspended owing to the sinking of the winze. If you refer to my report of the mine at that time you will find the lode was worth full 10 cwt. of lead per fathom. I am pleased to say although only about 3 ft. have been driven since that time, and since the men have hoisted the winze, the lode is this day worth full 20/- per fathom—the best I have seen in the mine, and the end can be driven for 3/- 10s. per fathom, and the men train their own staff.

SOUTH WHEAL KITTY (St. Agnes).—S. Davey, J. Williams, Dec. 21: The ground in the adit cross-cut north is highly mineralised, and presenting appearances of nearing another lode. In No. 1 end, driving east of cross-cut, the lode is becoming more settled as we advance in the hill. The lode in No. 2 end, driving east of cross-cut, is about 1 ft. wide, with a regular northerly underlie, and is presenting appearance for the early production of tin.

ST. AGNES CONSOLS.—W. Vivian, Dec. 24: In the cross-cut driving north of the engine-shaft, in the 39 fm. level, we have cut into the lode about 1 ft.; it is of a very promising character, producing some good tin-stone; as to the size or value of the lode I cannot say, as we have not cut through it. The stope in the back of the 26 fm. level are worth 10/- per fathom for tin. In the 26 fm. level, driving east, the lode is 2 ft. wide, worth 8/- per fathom for tin.

ST. DENNIS CONSOLS.—Thos. Parkyn, Dec. 26: We are raising some capital work for tin. We are just at the point where three lodes form a junction, and we are opening up a large quantity of rich work for tin. The weather has made against us, it having been so wet; in a few days I shall be able to report to you full particulars. You must please bear in mind that these lodes are a new discovery, and are not the lodes on which so much tin was raised here a few years since by Messrs. Taylor and Sons.

ST. LAWRENCE AMALGAMATED.—W. Wasley, Dec. 26: St. Lawrence: The men get on well with driving the 52 yard level, and are glad to say that the lode has improved since last week, and looking very promising. The men clearing the old level have got in about 12 yards, which is secured all the way.—Valentine: The men in the 68 yard level cross-cut are getting on well with driving; the ground is just the same as last week.

TAMAR CONSOLS.—G. Rowe, Dec. 26: All our machinery is working well, and the old workings drained 11 fathoms below the adit level. The shaftmen are now engaged in repairing the old timberwork around the engine and whinlith shafts, also clearing up the rotten timber and stuff. The masons and carpenters are busily engaged in completing the upper part of the buildings, and preparing to put on the roofs. At the same time the engineers are fixing the new drawing-machine, and erecting pails, with other necessary timberwork in connection with this part of the machinery, which we calculate will be in good working condition by the end of this week.

TAMAR VALLEY.—John Goldsworth, Dec. 26: Weston's Engine-Shaft: The sinking is being forced on below the 57 with all speed, and good progress is being made. The stratum is strongly charged with mineral. The lode is 2 ft. wide, of a most promising character, spotted with silver-lead and copper ore. We regard the copper as a most favourable indication for the production of silver-lead ore as the sinking progresses in depth. The tributaries are working with good spirit, and judging from their breakings they are earning fair wages. The machinery through-out the mine is in good condition and working well.

TANKERVILLE.—Arthur Waters, Dec. 26: We have cut down footwall of Watson's shaft below the 130, sufficiently to show us the position and dip of the main body of lead ore, consequently preparations are now being made to resume sinking deeper. Everything will be in order for sinking by Monday next. The lode in the very bottom, where the shaft goes down, is of strong character and shows a course of lead ore 5 feet in width, which is worth 15 tons, or 225/- per fathom. We feel assured the lode is getting wider and richer as we go east, and that in sinking to the 140 fathom level the shaft will be as productive as heretofore. The other points throughout the mine are yielding ore in quantities equal to any thing seen here for the last 12 months. Machinery working well.

TERRAS (Tin).—M. Rickard, Dec. 26: Edwards's lode, at the 49, much as when last reported on. We have commenced the rise in the back of the 49; the is good, and we calculate to communicate with the 30 in about six weeks from the present time. The sinking of the great engine-shaft will be resumed forthwith also the flat-rod shaft. Since the last report we have been exploring the old men's workings west; the whole of the ground, baring some small arches or pillars, has been taken away down to the water line, and our hope here is below the old men; this we purpose doing by the flat-rod shaft, as stated above. The stope in the back of the 29, on Edwards's, is yielding some splendid stuff, but we have been anticipated by the old men. The driving on level on No. 1 elvan, is worth about 7/- 10s. per cubic fathom. The stope in the back of the level, on No. 1 elvan, is worth about 8/- per cubic fathom. No. 2 stope on No. 1 elvan, is worth about 8/- 10s. per cubic fathom. The lode in the level west, on new east and west lode, is worth about 10/- per fathom. The stope in the back of the level, on new east and west lode, is worth about 8/- per fathom. Good progress is being made in the new whinlith shaft, but the water is issuing rather freely. All our surface works are being urged forward.

THE LOVELL.—J. Nancarrow, Dec. 26: The new wheel was started to-day, which went off as well as could be desired, and everything connected with it, both at surface and underground, work exceedingly well. The water is being forked rapidly, and all being well, the men will be at work in the bottom of the shaft before the morning. This has been done very speedily, for it is only seven weeks since we commenced about the wheel-pit. The stope at the 12 is worth 70/- per fm. The progress in driving the adit is fair. The tin is coming out well at the stumps.

TEAILEIGH WOOD.—E. Hosking, John Harris, Dec. 24: The following bargains were set on the 29th inst.:—The 44 to drive on the lode west of the engine-shaft by six men, at 11/- per fathom; lode worth 8/- per fathom for tin. The 44 to drive east of engine-shaft to six men, at 8/- per fathom, to cut through the lode; the lode in the present end will produce stamping work for tin. The 34 to drive west of engine-shaft by four men, at 7/- per fathom, for 2 fms., or the month; lode worth at the present time 7/- per fathom for tin. The 34 fm. level to drive east of the engine-shaft by four men, at 7/- per fathom; the lode is large, producing stamping work for tin. We have put a pair of four men to stope the back of the 34, at 3/- per fathom, that was left by the old workers, to work a month on it, in order to see what it is worth for tin, which we hope to ascertain in a few days, and to give you its value in our next. The 34 to drive east of the Windmill shaft by six men, at 18/- per fathom, for 6 ft. stent. We expect a change in the ground in this end very shortly. This end is to bring in a level under the winze sinking in the large bottom on the 24. The 24 to drive east of Windmill shaft by four men, at 11/- per fathom, the month; lode worth 15/- per fathom for tin. The winze to sink below the 24, east of Windmill shaft, to nine men, at 21/- per fathom, and 2s. 6d. per ton of stuff broken; lode worth 90/- per fathom, for 12 ft. long and 6 ft. wide. No. 1 stope above the 24, east of Windmill shaft, to four men and two boys, at 4s. 6d. per ton of stuff; lode worth 60/- per fathom for tin. No. 2 stope above the 24, east of Windmill shaft, to three men, at 4s. 6d. per ton of stuff; lode worth 20/- per fm. We have set the two stoves above and below the 19, west of the cross-course, to one pair of men, it being more convenient to work the both as one; set to four men, at 4s. per ton of stuff; lode worth from 15/- to 18/- per fathom. A bargain to make the adit level good into the old lode by three men and three boys, at 25/- per bar-gain: this level, when completed, will enable us to have direct communication with the work, the lode, which we think will pay well for taking away.

TREVARACK.—Jas. Pope, Dec. 26: In the 61, east of engine-shaft, the lode is 2 ft. wide, producing average quality tinstone, at present saving work; it has very much improved in the last 2 fms. driving. In the 61 west the lode is 2 feet wide, producing low quality tinstone, but not enough to save at present. In the 48 east the lode is 2 $\frac{1}{2}$ ft. wide, a very promising looking lode, producing a little tin.

VAUGHAN.—Dec. 24: In the engine-shaft sinking, under the 20, the part of the lode being carried is chiefly composed of a light clay-slate, carbonate of lime, and crystallised quartz, containing occasionally spots of lead, and is being carried down with all speed to the required depth for a 32, which will be done (weather per-

mitting) in four weeks hence. In the 20, east of engine-shaft, the lode is about 1 $\frac{1}{2}$ yard wide, and much of the same character as last reported, yielding fully 1 ton of lead ore per fathom. In the deep adit level east, the ground in the present end is composed of a light clay-slate, branches of crystallised spar, containing strings of mungle and small spots of lead, highly mineralised, just behind the end, forebreast; we have intersected and passed through a soft branch about 2 $\frac{1}{2}$ yards wide, running about 20° east of north, since which the ground has become more favourable for progress, and we hope it will continue such until we reach the wall of the lode. In the cross-cut north of surface, in Pyne's lode, the ground is not so favourable for exploring, yet fair progress is being made. In the shallow adit level, west of Fronterrig, the ground has undergone a change, the lode on the north part being soft, and we are now driving on the south part of the lode, which is hard, being composed of a clay-slate and quartz, containing spots of lead, but not sufficient to value. Our machinery is in good working order.

VAN CONSOLS.—Jas. Rose, Dec. 26: The 60, east of Gundry's, on the north part of the lode, is without material alteration since my last advice, still producing upwards of a ton of ore per fathom. The cross-cut south, behind this end, is driven through the lode, which is 4 $\frac{1}{2}$ fathoms wide, and contains small quantities of ore throughout. The 45 east, on water fissure, produces occasional stones and a slight mixture of lead—very promising. The 45 west, on ditto, is improving, and yields 10 cwt. of ore per fathom; the lode is better defined than when last reported. In the 45 east of rise, the barytes mentioned last week has disappeared, and lead taken its place: we are getting fine stones of ore on this wall of the lode, 1 ton per fathom, but we have not yet had sufficient time to open its full width; the south and most productive part is still standing, beginning a rise against the winze under the 35 prevent us from cutting into it this week. The rise in the roof of this level is producing fully 2 tons of ore per fathom, and still a portion of the lode standing. The 35, east of Little's, is much the same in appearance as for some time past, yielding occasional slabs of solid lead ore, associated with barytes. The 25, east of Little's, is without the slightest alteration since my last, but there is every probability of our entering into one ground directly. The 75, east of the western engine-shaft, we are still clearing and securing; I daily expect to see the end, when I will level and dial the ground, in order to ascertain what we have to drive and sink to communicate the 60, west of Gundry's, with this level. I expect we shall make good discoveries of ore between the two last-named points. We are doing all we possibly can towards the completion of the new dressing-floors, and hope with more favourable weather to get it ready in a short time.

VERON.—John Pritchard, Dec. 26: We can only state the same thing over again this week concerning the water in the engine-shaft. It keeps at the same height above the 60 yard level. In the new shaft we continue sinking in the same kind and favourable lime rock, &c. We are pleased to say that the deeper we sink into the lead-bearing measures the ground improves; we have cut into a east and west joint or lode, of 9 inches wide on the south side of the shaft, composed of clay, &c., with small tumblers of limestone. Further particulars will be communicated to you in a few days. We have nothing doing on surface except smith and sawyers occasionally.

WEST CONDURROW.—R. Richards, J. Pryor, Dec. 24: The lode in the 42 fm. level, east of cross-course, is 2 ft. wide, and will produce from 2 $\frac{1}{2}$ to 3 tons per fathom. The lode in the 30 fm. level, east of cross-course, is 2 ft. wide, and will yield from 2 $\frac{1}{2}$ to 3 tons per fathom. No other change to notice in any of the other points of operation since last report.

WEST GREAT WORK.—S. J. Reed, Dec. 24: In the 20, west of Gundry's, on the north part of the lode, is without material alteration since my last advice, still producing upwards of a ton of ore per fathom. The cross-cut south, behind this end, is driven through the lode, which is 4 $\frac{1}{2}$ fathoms wide, and contains small quantities of ore throughout. The 45 east, on water fissure, produces occasional stones and a slight mixture of lead—very promising. The 45 west, on ditto, is improving, and yields 10 cwt. of ore per fathom; the lode is better defined than when last reported. In the 45 east of rise, the barytes mentioned last week has disappeared, and lead taken its place: we are getting fine stones of ore on this wall of the lode, 1 ton per fathom, but we have not yet had sufficient time to open its full width; the south and most productive part is still standing, beginning a rise against the winze under the 35 prevent us from cutting into it this week. The rise in the roof of this level is producing fully 2 tons of ore per fathom, and still a portion of the lode standing. The 35, east of Little's, is much the same in appearance as for some time past, yielding occasional slabs of solid lead ore, associated with barytes. The 25, east of Little's, is without the slightest alteration since my last, but there is every probability of our entering into one ground directly. The 75, east of the western engine-shaft, we are still clearing and securing; I daily expect to see the end, when I will level and dial the ground, in order to ascertain what we have to drive and sink to communicate the 60, west of Gundry's, with this level. I expect we shall make good discoveries of ore between the two last-named points. We are doing all we possibly can towards the completion of the new dressing-floors, and hope with more favourable weather to get it ready in a short time.

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WHITEHAYE IRON.—Thomas Rosewarne, Dec. 26: No. 1 Drift, Nab Gill: The rise in back of this has been risen 1 $\frac{1}{2}$ fm. I see little or no change in its appearance since last report. I think we shall have it hoisted to surface in about three weeks, when we shall be able to put men to stop and break iron much faster than at present. No. 2 drift has been driven about 2 fms.; the lode is split with a horse of granite, and I think in a few days this will wear out, and resume its former appearance and productiveness; it is now producing about 20 tons to the fathom. The slope in back of this drift will produce 25 tons to the fathom. No. 3 drift has been driven 2 fms. We are now driving through the same stratum of ground as we had in No. 2 before we cut the body of ore, and I expect to reach it here in about 3 fms., the indications being very good; the ground is very wet and spare for driving. No. 3 Cutting, Top of Hill: I see little or no change here since last report. The lode will produce 20 tons of ore to the fathom. Surface Work: Our daymen have been employed in trammeling iron from the drifts to the foot of the incline road ready for carting, repairing road from shoot to village, &c. There is now lying at the foot of the incline road about 150 tons of ore; 100 tons have been carted to Drigg station since last report. I have employed 20 miners, four daymen, three boys, and one smith. The masons and carpenters are proceeding with the cottages as fast as the weather will permit.—Houter Tarn: I have two men employed in No. 1 drift on Red Pike vein. The lode here is improving, and will produce 10 tons to the fathom.

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New Quebrada, 3 to 3½; San Pedro, 4½ to 5; Sweetland Creek, 2½ to 3; Utah, 1 to 1½.

DUBLIN, DEC. 27.—Business has been rather contracted this week, owing to the Christmas holidays taking place, and they have occupied most of the week. Were it not for the excitement in the Erie share market there would have been little business done on the Stock Exchange. Government funds are firm, and have not varied much. India Five per Cent. Stock remains firm; the Four per Cent. Stock is heavy, and has declined ½ per cent. Foreign funds are firm, and have not changed much, except in the case of Erie shares, which have advanced from 42½ to 50½, and on Monday left off firm at this last price, owing to the return of plunder made by Gould and the hope of a dividend about to be declared. Spanish Bonds are dull, and American Bonds are firm, but have not changed much in price. Bank of Ireland Stock is dull, and has declined ½ per cent. Hibernians are dull, and have declined 1½, on the issue of 500 new shares at 25. prem. It might have been better had a call been made on the old shares instead of issuing so much new capital. Munsters are weak, and have declined ½. Nationals are also ½ lower. Mutual of Liverpool show no change in price, and are firm. Provincial old shares have declined ½. Royals are firm. City of Dublin Steam stock declined 1 per cent. Dundalk shares are in demand, and have risen 12s. 6d. per share. Mine shares are dull, and there is not much disposition to enter into fresh transactions. The recent disclosures of a mine very much thought of has in a great measure damped the public ardour for mine shares. Berehavens are quoted at 40s., with the recent call of 10s. per share paid, showing a decline of 1s. 6d. per share. Cape Copper Mining Company of Ireland and Wicklow Copper are both ½ lower, and rather depressed in price. Telegraph shares are firm, and have not changed much. Alliance Gas shares have a drooping tendency, and have declined ½ to ½ all round. It is not expected the Corporation arrangement as to taking over this company will be carried out, as it is looked upon as a most gigantic scheme and a job by all who are concerned in it. Dublin Tramways are firm, and have advanced ½. National and Patriotic Assurance shares are firm. Railways are steady. Cork and Passage have advanced ½; Belfast Junction stock, ½; Drogheda stock, 1 per cent.; Kingstown stock, ½; Wicklow stock, ½; Great Southern and Western shares, 1 per cent.; and Midland Great Western shares ½ per cent. Waterford and Central stock advanced ½ per cent., and Waterford and Limerick as much as 2 per cent. Railway preference and debenture stocks are all firm, and have not changed much since our last report. Dublin Cattle Market and Waterworks bonds are firm, at last prices. Ballaart and City debentures are firm, at 91 for the former and 81 for the latter.

The market for Mine Shares on the Stock Exchange during the week has participated in the general dullness prevalent at this season of the year. American mines have been largely dealt in, and home mines have remained without any important quotable change.

Tin mines have been supported by the hardening appearance of the market for that metal, and from the continued firmness of lead there has been a fair demand for mines producing that metal, more particularly for Van, Roman Gravels, South Roman Gravels, Tankerville, and West Tankerville.

Emma shares, after declining to 14½, 15½, advanced to 17½, upon the official announcement that the postponement of the payment of the monthly dividend did not arise from any failing off in the productiveness of the mine, but simply from insufficient remittances having been received from the other side, owing to the employment of the cash in remedying the difficulties occasioned by the flooding of the mine, and liquidating the law and other expenses. Up to the present time each monthly dividend has been paid in advance, but to continue to do so with unfailing regularity needs either a considerable cash reserve or an advance on ore at surface. The present produce of the mine is largely in excess of the dividends, and the directors express a confident expectation of being able to resume them on Feb. 1, but suggest (as stated in last week's Journal) the desirability of in future declaring the dividends quarterly, as thereby regularity will be ensured, and a considerable saving of labour and expense effected. This suggestion will be submitted to the shareholders at the general meeting, to be held as soon as the accounts made up to Dec. 31 shall have been audited. The present market operations have no reference whatever to the merits of the mine, it being stated upon the best private authority that the ore from the deepest level is exceptionally rich in silver, and that the mine, as a whole, is far richer than at any previous period.

Flagstaff shares have been in considerable demand throughout the week, and close 15½ to 16, firm; most satisfactory advices continue to be received. The latest official information shows that the ore has widened out in the lowest level to 10 ft., and is of a much higher grade in gold and silver than any hitherto taken from the mine; this level being at least 600 ft. deep from the surface, makes in reality another mine, independently of what has hitherto been calculated upon. The ore sacked and at the ore-house ready for shipment is valued at \$150,000. The furnaces are running well and turning out the usual quantity of bullion. The manager being fully prepared for all emergencies, does not anticipate any interruption whatever to the product during the winter.

Camp Floyd, 2½ to 2½; the report, printed in another column, is of a more cheering character, and good expectations are held of striking a body of pay ore in one of the levels or shafts now being sunk and driven. Utah, 1½ to 1½, and in demand; a meeting is called for Jan. 2, to pass the necessary resolutions for raising fresh capital. The report of the committee will be in the hands of the shareholders on Monday; we understand that they recommend the raising of fresh capital, as upon investigation they are satisfied that the mine is a good one, and can be made to pay largely.

The water season for the working of Hydraulic Mines has again commenced. Sweetland Creek, 3½ to 4; the new tunnel is in 2175 ft. The superintendent thinks that there is about 150 ft. further to drive, and that the same will be ready for washing through about the beginning of March. Notwithstanding the necessity for this work, the company has paid 75000 in dividends during the year just closing, or equal to 12½ per cent. on the capital of the company. Birdseye Creek, 2½ to 3; from the extensive preparations that have been made for the present water season larger dividends may be expected during the ensuing year. The company has paid 5s. per share dividends during the past year on the shares of 4s. each, notwithstanding the large outlay, properly chargeable to capital, but which has been paid out of revenue. Cedar Creek, 3½ to 3½; the superintendent telegraphs that rain has set in, and that the Union and Pacific claims are running. The company having some seven or eight claims rigged up for work, the profit for the season will, no doubt, be very large, while it is estimated that there is above 50 years' work, at double the present rate of working, before the claims are exhausted. Rica, 2 to 2½.

Among Lead Mines Van maintains the last-quoted price 37 to 39; the mine continues to open out exceedingly rich, especially in the lower levels. East Van, 5 to 5½; the cross-cut is still being proceeded with. Van Consols, 5½ to 5½; the mine is reported as opening out rich; the lode in the 45 east is worth 4½ tons per fathom, and in driving upon the other part of the lode it is believed a further considerable improvement will take place. Tankerville, 14 to 15; West Tankerville, 3½ to 3½; these shares have been in demand during the week. Pennerley, 2½ to 2½; the mine is looking better, and sold 75 tons of lead on Tuesday at 15½. 1s. per ton. Roman Gravels, 18 to 19; South Roman Gravels, 32s. 6d. to 37s. 6d. and in demand. Bog, 1½ to 1½; the draining of the shaft still proceeds satisfactorily. The company sold on Tuesday 25 tons of lead at 15s. 3s., and 50 tons of blonde. Perkins Beach, ½ to 1; the ground in the south cross-cut has changed for the better, and the 20 on No. 2 caunter has very much improved during the week.

In Copper Mines, the chief feature has been a renewed demand for Cape Copper and San Pedro shares. Hingston Down, 8 to 8½; at the meeting, yesterday, a dividend of 5s. per share was declared. New Quebrada, 3 to 3½.

In Tin Mines, the chief feature has been a renewed enquiry for East Lovell shares, which close 18 to 19; the lode in the skip-rod shaft is reported to be worth 150 per fathom.

Subjoined are the closing quotations:—

Bog, 1½ to 1½; Carn Brea, 150 to 155; Devon Great Consols, 6½ to 7½; East Consols, 4½ to 4½; East Wheal Lovell, 17 to 18; East Van, 5 to 5½; Great Laxey, 15 to 15½; Great Wheal Vor, 6½ to 6½; Marks Valley, 3½ to 3½; North Roscar, 17 to 20; Pennerley, 2 to 2½; Parys Mountain, 1½ to 1½; Roman Gravels, 19 to 19; Tankerville, 14 to 15; Tincoff, 55 to 57; Van, 37 to 40; Van Consols, 5½ to 5½; West Caradon, 2s. to 4s.; West Chiverton, 11 to 12; West Tankerville, 3½ to 3½; Almatha, ½ to 1; Birdseye, 2½ to 2½; Camp Floyd, 2½ to 3½; Cedar Creek, 3½ to 3½; Cape Copper, 27½ to 28½; Don Pedro, ½ dia. to ½ perin.; Eberhardt, 9½ to 10½; Emma, 15½ to 15½; Flagstaff, 15½ to 16½; Gold Ram, ½ to 1; Pacific, ½ to 1½; Richmond Consolidated, 3½ to 4; Rica, ½ to ½; San Pedro, 4½ to 5; Silver Buttes, 3½ to 3½; St. John del Rey, 20 to 21; Sweetland, 3½ to 4; Silver Plume, 1½ to 1½; Utah, 1½ to 1½; United Mexican, 3 to 3½.

The half-yearly interest due on Jan. 1 next on the First Mortgage Construction Bonds endorsed payable in sterling in London, of the New Orleans Jackson, and Great Northern Railroad Company will be paid on and after that date at the counting-house of Messrs. J. Henry Schroder and Co., 145, Leadenhall-street. The directors of the Peel River Land and Mineral Company (Limited) have decided to recommend that a second dividend of 2 per cent. be de-

clared at the next annual general meeting, on Jan. 17, being a total distribution of 4 per cent. for the year ending June 30.

The following dividends have been declared during December:—

Mine.	Per share.	Amount.
Tincoff	£1.15 0	£10,500 0 0
Doleath	1 10 0	6,144 0 0
Carn Brea	4 0 0	4,000 0 0
South Cardon	4 0 0	2,048 0 0
Hingston Down	0 5 0	1,500 0 0
West Chiverton	0 10 0	1,500 0 0
Wheat Mary Ann	0 4 0	204 16 0
Cape Copper	1 5 0	25,000 0 0
Emma	0 8 0	15,000 0 0
Portgibaud	1 3 0	11,500 0 0
Sierra Buttes	0 2 0	11,250 0 0
Flagstaff	0 5 0	7,500 0 0
Fortuna	0 5 0	6,250 0 0
Almada and Trito	0 0 6	750 0 0
Mammoth Copperopolis	0 5 0	375 0 0
Total		£103,821 16 0

Registration of New Companies.

The following Joint-Stock Companies have been registered:—

KNOX AND BOYLE GOLD MINING COMPANY (Limited).—Capital 100,000, in 100, shares. To acquire and work mines in Tuolumne county, California. The subscribers (who take one share each) are—W. C. Cox, 4, Hoe-street, Walthamstow; E. Newman, 7, Crescent-terrace, Bessborough-gardens; G. Nolan, Oldham Park; J. M. Bushell, Moss-hall-crescent, Finchley; W. B. Yaldwyn, Vulcan-road, New-cross; and W. E. Riddall, 16, Park-road, New Southgate.

ALLITHWAITE IRON MINING COMPANY (Limited).—Capital 3000, in 50, shares. For the acquisition and development of iron mines at Lower Allithwaite, Cartmel, Lancaster. The subscribers (who take one share each) are—J. Day, 9, Great Winchester-street; G. W. Hamann, 9, Great Winchester-street; H. Matthews, Ferulane-road, Balsham; J. Tyler, 24, Snyoks road, Old Kent-road; G. Browne, 19, Budwey-row, E.C.; W. Knight, 11, Austinfriars-passage; and W. Rowsell, 46, Crayshaw-road, Brixton.

GREAT WESTERN AND BRAZIL RAILWAY COMPANY (Limited).—Capital 350,000, in 200, shares. For the construction of a railway from Recife to Limoeiro, in the provinces of Pernambuco, Brazil. The subscribers (who take one share each) are—F. Youle, 155, Gracechurch-street; H. R. Balme, 57, Tulse-hill; A. P. Youle, Bala House, Clapton; John Chapman, 2, Leadenhall-street; E. C. G. Sheward, 17, Leinster-square; W. Albert Ricardo, Maidenhead; and W. H. Punchard, Westminster-chambers.

LIVERPOOL ALLIANCE LAND COMPANY (Limited).—Capital 50,000, in 100, shares. The subscribers are—S. Kearns, 32, Chapel-street, Liverpool; P. W. Jones, Cook-street, Liverpool, 25; G. Carr, 10, Canterbury-street, Liverpool; P. W. Sharman, 30, North John street, Liverpool, 25; J. M. Read, South John-street, Liverpool, 2; G. H. Goodwin, South John-street, Liverpool, 2; and W. Gevis, Bootle, Liverpool, 25.

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

From M. W. BAWDEN, Liskeard, Cornwall.—The Mining Market is firm for good dividend and progressive stock, which augurs well for the approaching New Year, and most mines have recently advanced in value, with improved prices for tin and copper, which is a somewhat novel feature at the close of the year. In taking my annual review of the departing year I find the mining market has not been characterised by that amount of business throughout the year as at the commencement; several of the leading tin mines and those most in favour were selling at exorbitant prices, whilst a few others of equal promise were almost neglected. The last six months of the year has shown a decided falling off in the prices of most stock, which are now selling at a more reasonable and proportionate value in accordance with their real prospects. The returns of black tin sold from the various mines in the two counties of Cornwall and Devon shows a decrease of over 200 tons as compared with those of last year. Several of the new mines, and the reconstituting of some of the old ones, which started during the mining mania, holding out great promises of success, and accompanied with flattering reports, have ceased to work, with every probability that others of the same class will have to follow in the coming year. Copper mines have been dull, and partially neglected (tin mines claiming priority), and show a further diminution on their aggregate returns in comparison with those of last year. In 1871 the total quantity of copper ores sold from Cornwall and Devon was 81,937 tons, whilst the returns of the present year have been 65,364 tons, amounting to 316,303½ tms. 6d., at an average of 6½ per cent. for fine copper, showing a corresponding decrease of 5586 tons on the previous year. It is highly probable, from the present and prospective appearances of the metal trade, with the doubtful returns of tin from Australia, that prices will be fully maintained for some considerable time. With the favourable dawn of the New Year, and more steady and legitimate prices for stock, it will give a further impetus to mining, and bona fide investors will find that a well-advised and careful selection of mines is equal to any other commercial enterprise, and will prove a remunerative source for the investment of capital. Wishing my numerous mining friends a Happy and a prosperous New Year.

GREAT WHEAL LAXEY.—This company sold, on Dec. 24, 100 tons of lead ore at 24/10s. 6d. per ton, realising £242. 10s. LOVELL.—The shaftmen are now sinking the shaft on a lode worth 180 per fathom, which will materially increase the returns of tin, and it is expected, enable the executive to increase the dividends at least 50 per cent.

The WESTERN ANDES MINING COMPANY is likely to be a great success. The applications for shares were far more than the number to be allotted. The allotment letters were posted last evening.

BAMPFYLDLE (Copper and Iron).—This property is claiming attention amongst the investments of the day, and in development they are making important discoveries both in copper and iron. The iron lodes are yielding large quantities of ore, waiting only conveyance over the Devon and Somerset Railway, which is expected in February next; then large profits from this source must be available for dividends. The copper mine is also improving; increased quantities are being broken from their various points of operation, besides an important discovery of the richest silver-grey copper ore ever seen in the mine has just taken place at the 80 fm. level. It is extraordinary, considering the old company raised over 80,000, worth of rich copper ore from the 40, that they did not drive the 80 before, and it was not touched until a new agent was appointed.—Capt. Samuel Mitchell, a practical mining engineer, advised it; hence an important discovery.

BALMYNEAR (Wendron).—The present adventurers commenced operations about two and a half years since. At that time they had no machinery but a horse-whim and water stamps; but since then they have erected a 24-inch rotatory engine, with 25 heads of stamps, and are preparing to fit 16 additional heads. They have laid out suitable dressing-floors, and erected two ovens for burning tin ores. A 50-inch pumping engine was set to work a short time ago, and an engine-shaft is now sinking, to enable them to work on a tin lode or deposit about 7 fathoms wide. In the south part of the set there is a valuable discovery has also been made in the last few months, a lode has been opened from surface about 30 fms., and found to be from 4 feet to 7 feet wide. Three or four sets of tributaries are now engaged in opening this lode for about 40 fathoms in length in addition, making the whole length opened about 70 fathoms. This part of the mine has been nearly closed for the last two months, until the pumping-engine was set to work, for want of power to drain it. The prospects of the north part, and also the south, are very good, and it only requires the completion of the present erection to place the mine on the dividend list. About 11,000½ worth of tin has been sold in the period named, and the shareholders may be congratulated on the cheering prospects of the mine. A large number of shareholders attended the meeting held at the mine on Dec. 18, and were highly pleased with the progress made in opening the mine and the erection of machinery, and more especially with the general prospects of the mine.

NEW WHEAL SETON.—After 17 years' patient mining and call paying, during which time not 50' of tinstiff has been sampled, the adventurers in New Wheal Seton seem likely to meet with success. Having determined some time since to drive a cross-cut west on the lode in the 102, and to cease sinking the shaft, the cross-cut was proceeded with, and stones of capital tinstiff have been discovered. Practical men are all united in the opinion that the discovered stones and the general appearance of the lode augur well for a plentiful yield hereafter. At present the lode is yielding 1½ ton of tin per fathom.

MARKE VALLEY.—A very valuable discovery of copper ore has just been made in whole ground at the 100 fm. level, and the shaft is down to the 112, where driving is commenced in a beautiful channel of ground by the side of the lode, which will, no doubt, be cross-cut as soon as practicable. This is of great importance, being under the rim of ground that produced such enormous quantities of ore in the upper levels. Tin stamping has been commenced, and regular returns of that mineral may soon be expected.

MINING NEAR BODMIN.—We hear that Trefoil Mine, which was taken up about 12 months ago by a private company from the North, has turned out so well that it is to be worked extensively as an independent company, under the title of the Trefoil Tin and Iron Mining Company (Limited). The company is being registered, and though the prospectuses are not yet out of the printers' hands, a number of shares have been privately applied for. The iron, of which some thousands of tons have already been shipped, is very rich, containing 63 per cent. metal, and the tin lode (of which there is sufficient opened out to last for some years without further explorations) has been sampled at seven different points, and gives an average value of 2½ per fathom, which no one interested in mining need to be told means a very large profit, particularly as the mine is drained by an adit level to a depth of 36 fathoms, and has water-power for 24 heads of stamps. Mr. Thomas Hooper, of Chapel-street, Bodmin, is the managing captain, and his subinstructors to show the mine to anyone who may wish to see it. We may add that the capital of the company is 30,000, of which the proprietors take two-thirds in paid-up shares, and retain the management, leaving 5000 shares of 2½ each for subscription.

SUCCESSFUL MINING.—As an example of successful work on mining property, we make some extracts from the quarterly report of Mr. H. Prideaux, of the Pacific Company's Works at Austin, from a London paper. There were 819 feet of levels driven under contract; 183 feet of cross-cuts; 198 feet of rises; 204 feet of winzes sunk and 379 fms. stoned; raised from stoves 508 tons of ore; milled 498 tons at the Manhattan mill; gross assay value \$65,237.21; net, we assume to be after paying charges for mill work: 10 tons were shipped to Liverpool of an estimated value of \$6500 to \$7000. The Manhattan Company calculates to return 90 per cent. of the contents, when they have the Stetefeldt furnace in operation. The company having

no reduction works of their own are unable to work any but the richest ore, which Mr. Prideaux considers a great drawback to their prosperity. This gentleman refers with pride to the results accomplished under his administration. He has drawn no money from London—an astonishing fact. Let our English friends send out a few more such gentlemen as this one appears to be, for he is unknown to us, and our mines will bear a much better reputation in Europe as paying properties than they have enjoyed hitherto. We do not think that the failure, which has happened on this coast should always be attributed to the mines themselves, the only wonder has been to us that so many have paid even expenses under the extravagant system of management so long in use, but we hope this will be remedied in the future. Intelligent, honest, and economical management will do more to give our mines a reputation abroad than anything else that could be done to further that object.—*Scientific and Mining Press (Nevada).*

THE PACIFIC COAST MINING BUREAU.

London Branch Office of the "Mining Bureau" of the Pacific Coast, Great Winchester-buildings.

SIR,—In answer to a number of communications and enquiries addressed to the undersigned through the "Mining Journal," concerning the condition of certain Californian and other mines, some of which have been examined and reported upon by the Bureau, while others require its examination previous to their introduction on the English market, he begs to inform these enquirers that they can communicate with him either by letter, or by personal application, at the above address (offices of Messrs. Elkin, Goetz, and Co.).

J. BERTON, Vice-Consul of France,
President of the Mining Bureau.

NOTICES TO CORRESPONDENTS.

* * * Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt. It then forms an accumulating useful work of reference.

UTILISATION OF COAL DUST.—It was stated some time since in the Journal that a furnace had been invented by which small coal could be burned for the generation of steam without converting it into bricks. I believe it consisted of a series of horizontal bars arranged obliquely, that is, stair-fashioned—so that any of the dust falling off one ledge was caught by the next, but I cannot learn where the furnace is in use, nor where a working drawing of it can be seen. I suppose the amount of heat from each ledge is small, but if the ledges ran longitudinally along the entire length and on both sides of a cylindrical boiler without internal flues, I should think an enormous amount of heating surface might be secured, and also that an arrangement might be made for keeping up a constant and regular supply of the fuel by the use of hoppers, and some simple mechanical contrivance.—F. S. *Dudley*.

GOVERNMENT MINE INSPECTORS.—“A Welsh Mine Agent.”—It is difficult to understand the nature of the information required. The appointments are made by the Home Secretary. When a vacancy occurs candidates are recommended by the mine owners and working miners, and if the candidate be accepted the men are ordered up for examination, and the most suitable then receives the appointment. The new metalliferous mine Inspectors to be appointed will, doubtless, be Associates of the Royal School of Mines.

POOR COPPER ORE.—Can any correspondent inform me the lowest produce copper ore which the Cornish miners can profitably treat, also the fewest number of pounds of tin in a ton which constitutes an ore worth saving. Of course, I assume that the ore is of average composition—that is to say, that the tin does not contain wolfram and other things to add to the difficulty of the extraction; also, are there any arrangements for extracting copper by the wet way at the Cornish mines?—COLORADO.

MECHANICAL LOCOMOTION ON COMMON ROADS.—I am aware that from the restrictions put upon the use of steam on common roads it is impracticable to employ it for the propulsion of tram-cars; but I should be glad to learn whether the same prohibition extends to hot-air engines. There are some forms of hot-air engines which work almost noiselessly, and are very compact—so that they would prove an admirable substitute for horse-labour in tram-cars if not prohibited by law.

PRINCIPLES OF ASSAYING.—“R. F.” (Machynlleth).—The most reliable work upon the subject is Mitchell’s “Manual of Assaying,” recently published by Messrs. Longmans; the price is about 30s. For blowpipe, Plattner’s Manual is decidedly the best; the late edition is that of Prof. Cornwall, published by Mr. Van Nostrand, of New York; the price is 31s., including cost of importing it. There was a translation of Scherer’s book made by Mr. Blandford, and published by Messrs. Williams and Norgate at about 6s.

UTAH.—The letter published in last week’s Journal relative to the Utah Mine contains several errors, one of which should be corrected. “A Utah Shareholder” says Mr. Kitching is the Chairman of the company. This is incorrect; Mr. Batters has been Chairman for six months, and it is only fair to the late Chairman to state that the whole of the present debt has been incurred during the present chairmanship.—ANOTHER SHAREHOLDER.

ROYAL SCHOOL OF MINES.—The lectures on Mineralogy will be continued in next week’s Journal. Several articles and letters intended for publication this week are unavoidably postponed.

Received.—“Nemo”—“H. G.”—“W. C.” (Eclipse)—“Reader” (Yes)—“N. W. R.”—“J. T.”—“R. C.”—“J. R.”—“H. P.” (Nevada)—“H. M.”—“D. V. A.” (next week)—“F. W. M.”—“T. J. B.” (next week)—“R. T.”—“Burnt Fingers.”

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, DECEMBER 28, 1872.

THE COPPER TRADE.

During the quarter ending Dec. 31 the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish Ticketing, was 16,466 tons, which contained 1079 tons 18 cwt. fine copper, and realised 67,436. 8s., being equal to an average of 4*l*. 2*s*. per ton of ore, and 62*l*. 9*s*. per ton of copper in the ore. During the same period the British, colonial, and foreign ores sold at Swansea amounted to 7397 tons, which contained 1358 tons 2*1*/₂ cwt. of fine copper, and realised 107,687. 1*s*., being equal to an average of 14*l*. 11*s*. 2*d*. per ton of ore, and 79*l*. 6*s*. per ton of copper in the ore. The average produce of the ore sold at the Cornwall Ticketings was 6*l*. per cent., whilst that sold at Swansea gave an average produce of 18*l*. per cent. From this it will be seen that the aggregate sales by ticket were 23,863 tons of ore, containing 2438 tons 0*1*/₂ cwt. of fine copper, and realising 175,123*s*. The subjoined is a summary of the periodical sales at the Cornwall and Swansea Ticketings respectively.

The ores sold at the Cornwall Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Oct. 3...	£100	17	0	7 <i>1</i> / ₂	£4 10 0 ... 12s. 6 <i>d</i> ...	2574 ... 185t. 7 <i>c</i> ...	£11,612 11 6
“ 17...	103	15	0	6 <i>1</i> / ₂	3 14 0 ... 12 0 ... 3579 ... 219 11...	13,103 7 6	
“ 31...	101	14	0	6 <i>1</i> / ₂	3 17 0 ... 11 10 ... 1419 ... 91 18...	5,446 4 0	
Nov. 21...	102	14	0	6 <i>1</i> / ₂	4 1 0 ... 12 4 <i>1</i> / ₂ ... 3548 ... 234 11...	14,326 8 6	
Dec. 5...	106	5	0	6 <i>1</i> / ₂	4 2 0 ... 12 7 ... 1930 ... 123 11...	7,910 1 0	
“ 19...	109	9	0	6 <i>1</i> / ₂	4 8 0 ... 13 6 ... 3416 ... 223 0...	15,037 15 6	
Total for the quarter							
						16,466	1079 18. £67,436 8 0
Quarter ending September, 1872							
						16,483	999 12. 74,804 18 6
Quarter ending June, 1872							
						17,206	940 3. 92,372 18 6
Quarter ending March, 1872							
						15,291	1017 10. 80,703 13 0
Total for the year 1872							
						65,446	4027 3. £315,320 18 0
Showing a quarterly average of							
						16,361	1066 16. 78,330 4 6
Corresponding quarter, Dec., 1871							
						17,511	1165 7. 75,752 18 6
Total for the year 1871							
						71,118	4682 8. 284,435 7 0

The ores sold at the Swansea Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Oct. 1...	£100	10	0	15 <i>1</i> / ₂	£14 12 0 ... 15 <i>1</i> / ₂ 6 <i>d</i> ...	2126 ... 396s. 6 <i>t</i> ...	£21,038 15 6
“ 29...	98	15	0	14 <i>1</i> / ₂	10 19 3 ... 15 2 ... 1756 ... 252 8 <i>t</i> ...	19,254 18 0	
Nov. 12...	99	16	0	22 <i>1</i> / ₂	18 1 6 ... 16 4 ... 1339 ... 296 5 ...	24,205 3 6	
Dec. 10...	101	4	0	19 <i>1</i> / ₂	15 5 0 ... 15 11 ... 2156 ... 416 3 ...	33,190 3 0	
Total for the quarter							
						7397	1358 2 <i>1</i> / ₂ £107,687 1 0
Quarter ending September, 1872							
						6901	1188 3. 103,436 3 6
Quarter ending June, 1872							
						7934	1200 8. 116,693 6 6
Quarter ending March, 1872							
						2456	435 1. 39,487 16 6
Total for the year 1872							
						24,688	4181 14 <i>1</i> / ₂ £367,294 7 6
Showing a quarterly average of							
						6,172	1045 9. 91,823 12 0
Corresponding quarter Dec., 1871							
						5,475	943 13. 67,492 13 6
Total for the year 1871							
						25,724	4422 7. 291,159 8 6

THE NEW ACT—EXAMINATIONS FOR MANAGERS.

As the time approaches when the new Act for the regulation of mines comes into operation, and all persons connected with the management of collieries are endeavouring to master the technicalities inseparable from the redundant phraseology in which the various sections have been clothed, many omissions are found which it would have been well to have enacted with a view to prevent mistakes or appeals to the Home Office. Not the least important of those omissions is that relating to the examinations of candidates for the position of managers. On looking at the section relating to managers, the question naturally suggests itself as to what the examination is to consist of. The Act itself does not define what are the subjects in which the candidates must pass successfully, the only reference being that in section 28, which says that the Secretary of State may from time to time “make, alter, and revoke rules as to the conduct of such examinations, and the qualifications of the candidates, so, however, that in every such examination regard shall be had to such knowledge as is necessary for the practical working of mines.” That certainly appears as vague as anything well can be. There may be 60 or 80 boards in England and Wales, and yet no two agree as to the amount and quality of the knowledge necessary to fit a candidate for a certificate as manager. In some instances a high standard of scientific education may be considered essential, whilst in other practical mining knowledge only will be looked upon as necessary. Therefore, it is evident to avoid great divergence as is probable between boards the subject on which persons are to be examined should be defined. If it is intended to include such things as a thorough knowledge of the mineralogy of coal, the nature of gases, geology, pneumatics, surface arrangements for boilers, mechanical and other modes of ventilation, the drainage of mines by levels and machinery, the chemistry of combustion, the laws relating

to the sanitary condition of mines, and similar subjects, then the examination would be a most complete one, but probably such as would be reached by few. Indeed the field of mining knowledge is such an extensive one, and an examination on all subjects connected with it would be by no means such an ordeal as many persons in the position of colliery stewards would volunteer to pass through. It would also, we are afraid, rather puzzle some of the examiners to master, for it is not to be supposed that the body which includes three colliery owners and the three other persons employed in and about a mine, “not being owners, agents, or managers of a mine,” are all scientific persons—especially the latter three. As a rule we

look for superiority of knowledge on the part of examiners over the examined in the various branches of knowledge which form the test of qualification, so that to question a candidate on all the details relating to gases, ventilation, and the other branches which we have enumerated, the examiners themselves should be well up in those subjects. Such being the case, we question whether in any mining district in the kingdom a board such as we have suggested could be formed. If, on the other hand, the candidates to be examined only to the extent of the knowledge of the majority of the board—the owners or agents and other three persons working in and about a mine—then the test will be a comparatively easy one. In thus noticing the position of the examiners we do so in no carping or critical spirit, but with the sole purpose of drawing attention to what appears likely to lead to a rather anomalous state of things in a most important enquiry, and with a view to a remedy being provided. It does appear necessary that uniformity as to examinations, and the subjects which will form the basis of them, ought to be made compulsory. Should it be otherwise, and one board obtain a reputation for allowing candidates to pass comparatively easy, and another one make the examination severe and searching; it is certain that the great number of candidates would be acquainted with such an interesting fact, and would of course go to the former for the purpose of obtaining a certificate. It is to avoid such a state of things, and to make examinations what they ought to be, of a uniform character, clearly defined, that we have called attention to examination and the examining body.

THE FOREIGN COAL TRADE.

Notwithstanding the great price which still has to be paid for coal, the exports to France have been pretty well sustained during the last four or five months. The shipments of our coal to the French in November were, indeed, 180,781 tons, as compared with 193,213 tons in November, 1871; and 193,428 tons in November, 1870; while in the 11 months ending November 30 this year the aggregate shipments were 2,017,587 tons, against 1,770,498 tons in the corresponding period of 1871 and 1,993,234 tons in the corresponding period of 1870. It is a remarkable circumstance that France paid us £1,344,655. for coal to Nov. 30 of this year, while in the corresponding periods of 1871 and 1870, the corresponding payments did not exceed 799,136*l*, and 882,088*l*, respectively. These statistics prove conclusively that, in spite of all her misfortunes, France is still a great commercial country, and that her coal consumption has a constant tendency to increase. In the whole of 1871 France took our coal to the extent of 1,906,977 tons; in the whole of 1870, to the extent of 2,106,784 tons; and in the whole of 1869, to the extent of 2,017,585 tons; so that it appears tolerably certain that 1872 will witness a large progress in the French demand, which will probably absorb this year 2,180,000 tons of our black diamonds. In 1862 the corresponding exports were 1,306,000 tons; and in 1852, 652,000 tons, so that the consumption of English coal in France has multiplied more than threefold during the last 20 years, in spite of the introduction of a large quantity of Belgian and Prussian coal into France, and in spite, also, of the growth of the indigenous coal production of France. Twenty years ago coal mining industry in the department of Pas-de-Calais had scarcely any existence; it has since been developed upon a large scale, but it has not prevented the very decided increase in the consumption of English coal in France, indicated by the statistics which we have been summarising. That the use of steam-power among the French is destined to acquire a still further development no one can reasonably doubt; and this being the case, we may expect to see a gradual further increase in the consumption of English coal in France—or, at any rate, the present demand for it is likely to be well maintained, as the French do not, as a rule, take very kindly to coal mining.

English coal would also appear to have acquired a solid footing in Germany. The war of 1870 gave a decided impetus to the demand, which has not since been lost. Thus in the first 11 months

on business in St. Helen's, claimed compensation from Mr. John Cross, of the Greengate Colliery, Sutton. In June last the defendant contracted to supply the plaintiffs for a period of 12 months with not less than 12 tons daily of blend coal at 7s. per ton. He commenced to supply it, but ceased to do so in July, in consequence of which plaintiffs had to pay to other parties rates varying from 10s. 6d. to 15s. 6d. per ton for their coal. They, therefore, claimed compensation for this, and the case having been partially heard, a discussion took place as to whether the plaintiffs were entitled now to recover for a breach throughout the whole remaining period of the contract, or merely to the date when the action was commenced. A verdict was finally entered for the plaintiffs for £22, 6s., the loss which they had sustained down to the commencement of the action, it being understood that the contract is still open.

At the Moss Pit, on Saturday, the workmen found some remains of the 70 men and boys who were entombed there in September, 1871. There were four ribs, a thigh bone, and a portion of a skull found; but there was nothing to show to whose body they had belonged, and they were placed in a coffin to await the next sitting of the coroner's enquiry.

At the collieries of the Norley Coal Company, near Wigan, where a fire broke out a few weeks ago, the upcast shaft has now been sealed, in addition to the upcast in which a clay-covered scaffolding was placed immediately after the fire broke out. A small opening has been left at the upcast, where it is proposed to test the temperature of the mine, and so to ascertain the progress of the fire.

The Christmas holidays are causing their usual interruption to trade; but the general improvement which has been noticeable for the past week or two decidedly continues. In the iron trade makers are heavily sold forward, and in many cases contracts are said to have been entered into which will occupy a considerable portion of next year. In the Barrow district there is a great scarcity of skilled workmen. Coal and coke continue very dear.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Dec. 26.—There has been very little business done at the iron-works and collieries during the week so far, nor is there likely to be during the remainder of it. The new year, however, will open most favourably for the staple industries of Derbyshire, coal and iron. The year now drawing to a close has been the most prosperous known in connection with those trades—profits have been undoubtedly large, and the workmen have had a fair share of them by increased wages. From the first week in January to the last week of December there has been a large output of pig-iron, many new furnaces having been erected, so that the make for the year may be put down at fully 300,000 tons. The production of ironstone has been of a full average character, and for the year will be about 500,000 tons. That quantity, however, is considerably less than was required to keep the furnaces at work, and very heavy importations have been made from Northamptonshire, where the tonnage raised is greatly in excess of what is used at the local furnaces, of which there are only 12 in the whole of the county, so that the exports to the North by the Midland exceed half a million tons for the year. Amongst the establishments where business has been unusually brisk may be mentioned the Staveley Works and Collieries, the company being one of the most successful in the kingdom, the shares being at a very high premium, and but seldom offered for sale. Something like 5000 persons are employed at the foundries and pits, and at the former there has been an excellent business done in pipes of all dimensions and other castings, whilst to meet the increasing consumption of raw iron a couple of additional furnaces have been erected during the year. The pits have also been well worked, their produce going to London and the midland districts, as well as supplying the works. Dronfield and Uttoxeter are rapidly growing in importance, and, with the large works of Messrs. Cammell and Co., now nearly completed, and the new collieries in contemplation and those now being sunk, the ensuing year will show a very large increase, not only in the yield of coal, but in the production of iron and steel. The minerals on the Erewash Valley route are in a fair way of being more fully developed than they have yet been, for the line of the Great Northern between Nottingham and Derby cannot fail to lead to the opening out of new collieries and an unusually keen competition between that company and the Midland for the coal traffic to the metropolis. During the year considerable additions have been made to the siding accommodation at Clay-cross, from which place about 350,000 tons of coal have been sent to London during the past 12 months.

Lead mining appears to have undergone very little change indeed during the year, there having been no very material increase in the tonnage of ore raised. This, to some extent, may be attributed to the entire absence of railway facilities in several of the most important lead districts. It is, however, likely that an effort will be made by the landowners and others to provide accommodation for the transport of the mineral wealth of several important districts that at the present time are altogether isolated from any line of railway.

Sheffield has quite a holiday aspect to-day, the works being closed and the streets more than usually crowded. At several places the machinery is being repaired, and necessary alterations being made. The year has been an exceedingly prosperous one for every branch of the steel and iron trades. Machinery and engines have been in excellent request, as have steam-hammers, general forgings and castings. In Bessemer steel the make has been unusually large, and there has been a large quantity of rails, springs, tyres, and axles of that material produced, and next year promises to be fully as good as the present one has been. Every description of cutlery has also been in very brisk demand, so that makers have never before turned out so large a quantity of goods within the same period. The heavy armour-plate mills have done an excellent business during the year, and the ordinary rail mills have also been doing very well.

The collieries throughout the greater part of South Yorkshire have been very quiet during the last two or three days, so that it is scarcely worth while to attempt to notice the actual condition of the trade during that time. A brief glance, however, at the course of events during the year 1872 may be of rather more interest. So far, then, as coal is concerned it may be stated that never were the profits within 50 per cent. of what they were during the last six months. As an illustration, we can say that whilst house coal could be purchased in June at 8s. per ton at the pit's mouth it is now 15s. per ton. Contracts for steam coal in January were taken at 7s. 10d. per ton, now 16s. per ton has to be paid, and that only for short periods. Colliery proprietors are now opposed to enter into contracts extending over more than a month or two, and for longer periods increased prices have to be given. During the last two or three months there has been a falling off in the tonnage of coal going to London from the district, owing, it is said, to prices of coal being considerably less in Derbyshire than in South Yorkshire. A very good business has been done with Grimby principally in steam coal for exportation to the North of Europe, whilst a heavy tonnage has been sent to both Hull and Goole. Engine fuel has been rather scarce, and prices were more than double what they were in 1871. The makers of coke have had an unusually busy and lengthy season, and the profits have been even greater than those on coal.

The Iron Trade of South Yorkshire has been brisk in the extreme, and there was a very considerable increase in the output of pig-iron, several new furnaces having been blown in. The demand for the manufactured material has been in very many instances far in excess of the power to produce gas and water pipes. Patent metallic pistons and pneumatic machinery have been in great request "all the year round," whilst the rail, plate, and sheet mills have been worked to their full extent. The foundries and wagon-building works have also been well supplied with orders, so that the year will be long remembered as one during which the profits made were the largest on record so far as regards the iron and coal trades, and others connected with them.

THE MINES REGULATION ACT.—A meeting of the West Yorkshire Miners' Association was held on Tuesday at the Midland Hotel, Normanton, to take into consideration the provisions of the Mines Regulation Act. Mr. George Woodhouse, of Methley, presided. A discussion took place in reference to clauses in the Mines Regulation Act of last session, objections being urged against several of the special rules. It was decided that the men should not accept any bye laws made by the masters without their having a voice in the matter.

Dronfield, in company with a distinguished mining engineer, to inspect and negotiate for the purchase of an important coal-field, situated 1½ miles from Dronfield. The bed of coal is that of the justly famed Silkestone, and the acreage is said to be from 300 to 400. Besides coal, there is also understood to be a valuable bed of ironstone. In the event of the purchase thereof being effected, the development of the field will be on a very important scale.

REPORT FROM SCOTLAND.

Dec. 25.—The warrant market has been very strong during the past week, and a decided advance in the price has taken place every day. On Friday the closing price was 11s. 4d., on Monday it touched 12s., and yesterday, after a good business up to 12s., it closed rather lower—sellers 12s. 6d., buyers 12s. To-day there was no market, being Christmas. The principal cause of the speculative buying at present is the interruption to the market caused by the strikes in the mining districts, and with the present reduced stock comparatively little buying is sufficient to produce some excitement. The prices of makers' iron are so irregular at present that it is in vain to attempt giving definite quotations. It remains to be seen whether or not consumers and shippers will now give out their orders, and support prices at the high level they have again reached:—

	SHIPMENTS.
Week ending Dec. 21, 1872.....	11,486
Week ending Dec. 23, 1871.....	9,670
Increase.....	1,816
Total increase since Dec. 28, 1871.....	32,901
Imports of MIDDLESBOROUGH PIG-IRON INTO GRANGEMOUTH,	
Week ending Dec. 23, 1871.....	1,170
Week ending Dec. 21, 1872.....	750
Decrease.....	420
Total decrease for 1872.....	20,539

In closing what has undoubtedly been a most eventful year to the Iron Trade it were as well, perhaps, not to anticipate the authentic Statistics (which will appear in next week's Journal) by communicating even near approach to the facts, lest their tendency might be to mislead. Generally, however, we may be allowed to remark that the Scotch make of pig-iron has declined under a pressing demand, while the home consumption and foreign and coastwise shipments have exceeded past experience, and the stocks have been reduced some 300,000 tons, being the heaviest reduction on record. It was expected that the Annual Statistics would have been ready to-day, but owing to the dilatoriness of some of the ironmasters in forwarding their returns they will have to be delayed for a day or so.

There are still buyers of Malleable Iron in some numbers, but although we know that purchasers have to pay 20s. to 30s., a ton higher to get their orders booked, no advance has yet been declared on the list price, and 40s. is the sum generally named as impending. At the works not much business is being done owing to the scarcity of fuel, and the general unsettledness which marks the close of 1872. For foundry iron there are some enquiries for England, the Continent, and the East.

With regard to the Scotch Coal Trade, we cannot better express its present condition than by saying it is "in a mess." The masters and miners are at "sixes and sevens" as to the matter in dispute, and at one of the watering places on the Clyde coal has reached 5s. per cwt., or 5d. a ton. In the meantime trade is suffering—bodies of artisans depending on the aid of steam have no fuel for their furnaces—the Clyde steam companies are importing coal from England and Wales, and the aged and infirm poor are suffering sadly from the inclemency of the season. Our local papers teem with letters on the subject, meanwhile miners meet and coolly tell their employers they must have back their 10s. a day before they lift a pick, while the employers, as a *per contra*, decline to receive their work on such terms. Hence the dead lock—what an admirable opportunity for Arbitration and Conciliation!

From the Scotch ports the shipment of coal for the week amounted to 13,495 tons, against 31,300 tons in the corresponding week of last year. The colliery managers connected with the Lanarkshire institution held a meeting yesterday, for the purpose of interchanging their views on the Mines Regulation Act which is about to become law. As doubts were entertained on the interpretation to be put on several of the clauses, a deputation was appointed to consult with the Home Secretary on the points at issue, on the occasion of his approaching visit to this city. It was also agreed to organise local societies and a protective association.

The Omoa and Clelland Iron and Coal Company directors have fixed to pay on Jan. 2 an interim dividend at the rate of 10 per cent. per annum, equal to 4s. per share. We are informed that this will not only be paid out of the six months' profits, but that a considerable balance is carried over, leaving the guarantee fund untouched.

In our share market a good deal of business has been done. Shotts

Iron have advanced on the week 13s.; Tharsis Sulphur and Copper are 20s. better, while Ennals have fallen to 16s. Merry and Cunningham advanced 7s. 6d., and the Monkland Iron and Coal shares have been nearly stationary.

THE SCOTCH IRON TRADE—ANNUAL REVIEW.

Glasgow, Dec. 27.—In closing my last Annual Report, I embraced the opportunity of foreshadowing the reasonableness of expecting a continuously increasing use of iron during the year then ensuing; and now, at its close, I have to record that 1872 has become conspicuous for a world-wide demand, transcending all past experience! Sciences, art, and commerce seem to have combined in originating those multifarious purposes to which the application of iron is a necessity; and every year is adding to the number and utility of its manufactures. And now, at such a happy juncture, misgivings as to our ability to supply so imperative a demand come stealing upon us. For though substantial grounds exist for enlarging the production, and the scarcity and increased cost of the raw material, it has been lessened 70,000 tons. According to the returns, the make of pig iron in the last 12 months is only 1,000,000 tons, which, valued at the average price of the year, amounts to upwards of 5,500,000.

The home consumption, and shipments foreign and coastwise, number 1,586,000 tons. The stock has, therefore, been decreased 200,000 tons, which is the greatest reduction in one year on record. In ironmasters and warehousekeepers' stores it is now 194,000 tons. The fluctuations in prices, too, have never—in the history of the trade—been so rapid, bewildering, and delusive. They defied all principles of calculation. Advancing from the lowest (72s.) in February, to 137s. 6d. on July 25, and rising and falling 5s. to 35s. within short periods, they yield an average of 10s. 10d. per ton, or fully 4s. above the average of the previous 27 years. Gartsherrie, Coltness, Calder, Langloan, Summerlee, and Shotts iron, rose from 80s. to 100s., owing to the extraordinary demand for these favourite brands; while others fluctuated between 80s. and 140s. a ton. By a happy compensation, wages naturally rise as wealth increases. The colliers and miners' incomes have advanced to the unprecedented rate of 10s. per day! Still, the elements of their being are in striking disarray.

Great activity has prevailed in our malleable and foundry works and shipbuilding yards during the year, and they continue to prosper. Keeping in view that our vast resources are enriching the markets of the world, and that the great reservoirs through which the currents of trade circulate are becoming ploughed with wealth, it is no matter for surprise that the cry for iron is reaching us from every land. It is, therefore, now a most important question—How far, and at what price, will this demand for iron be met? The resources of buyers, our statistics show, are limited by the heavy consumption and shipments, and, should a similar demand continue, the competition cannot fail to give an impetus to prices, which may make the highest quotations of the year now closing prove only the average of the year which is dawning upon us. Still, we look hopefully to the responsive and expanding power of 1873; may it bring to all a full cornucopia.

THOMAS THORBECK.

REPORT FROM MONMOUTH AND SOUTH WALES.

Dec. 26. As anticipated in last week's report, the present week has been comparatively a blank as far as the manufacture of iron or the raising of coal are concerned; but there is little doubt that the new year will bring with it a more decided tone in the trade than can at present be recorded, though the leading makers are little inclined to share in the opinion that there will be any material improvement for some time to come. The report that the notices for a reduction in wages were about to be withdrawn altogether, or deferred for a time, has been officially contradicted. There is little or no ground for believing that they will be carried out at all the iron and coal works. It is uncertain as yet what course the men will take, but probably the masters will have some difficulty with them for a few weeks. As to the Tin-Plate Trade, there is hardly anything fresh to note. Orders are not plentiful, and stocks continue to accumulate with makers. Prices are likely to go up again if the quotations for iron are advanced.

The position of the Coal Trade is much about the same. Both as to demand and prices there is no room for complaint. The enquiry for steam coal on foreign account is good, and house qualities for

though lower, are firm, and the prospects for the future are fairly encouraging. The proposed reduction of 10 per cent. in the wages rate will in all probability be carried out. What the men will do is quite uncertain, but the wages question is about the only thing likely to cause interruption in the progress of the trade. The men continue to protest loudly against the reduction, and argue that there has been no change in the market to warrant the masters in making any reduction at all in wages. They have, however, agreed to withdraw their claim for an advance of 10 per cent., and have expressed a hope that the masters will withdraw their notice for a reduction. Deputations from the men have waited upon nearly all the masters, asking them to withdraw the notices and to consent to the question being settled by arbitration. But with a few exceptions the masters have refused to agree to either.

A very important meeting has been held at Merthyr, where Mr. Mundella, M.P., and Mr. H. Richard, M.P., addressed the men on the proposed reduction, and on the subject of arbitration, and at the close of the meeting the following resolution was passed:—"That this meeting cordially approve of the course pursued by the delegates of the miners of South Wales, in seeking to obtain by amicable arrangement the settlement of the threatened lock-out, and further resolve that, in the opinion of this meeting, the establishment of a council of arbitration and conciliation for the adjustment of capital and labour, is of the utmost importance in this district." This resolution was passed by coal and iron workers alike. At a delegate meeting held subsequently at Merthyr, the men disapproved of the course taken by certain persons in writing letters under assumed names in local papers, putting a false construction on the principles of the Union.

The Morfa Colliery, the scene of a terrible explosion a short time ago, is come to a standstill, owing to an outburst of foul vapours and gas from old workings, which arise from those old workings being on fire. Fifteen horses have been abandoned to their fate, but all the men have escaped. The works will have to be flooded before they can be worked again. A channel is being made to allow the tide to run into the pit, and fill it entirely with water. The manager, Mr. Gray, has been at the pit night and day since the outburst, and Mr. A. P. Vivian, M.P., arrived yesterday from London, as did also the Government Inspector.

SOUTH WALES COAL OWNERS' ASSOCIATION.—A meeting of this association was held on Wednesday, at the Mackworth Arms Hotel, when Mr. H. Vivian, M.P., presided, and there was a good attendance of members. On the motion of Mr. Sterry, seconded by Mr. C. Price, the following were appointed a committee to consider the special rules framed at Cardiff, and report to a future meeting:—Messrs. Glasbrook, Yeo, Price, Bell, Sterry, Morgan Reynolds, Aubrey Brock, Bain, and Nasmyth. It was proposed by Mr. C. Price, and seconded by Mr. Yeo, "That in compliance with the 26th of the Act of 1872, the meeting agrees to endeavour to obtain certificates of competency for their superior overseers, to be nominated as managers under the Act." It was proposed by Mr. Vivian, M.P., and seconded by Mr. E. M. Richards, M.P., "That it is desirable to divide the Inspector's present district, and that to form the western district, a line should be drawn from Bridgend to the top of Cwm Garw, and thence to the top of Neath." It was further resolved that the following names be recommended to the Secretary of State as mineowners, to constitute a board for the appointment as managers:—Messrs. H. H. Vivian, M.P., Charles Price, and J. Glasbrook; and the following as mine agents or engineers:—Messrs. A. T. Lewis, Evan Daniel, and W. Williams. On the motion of Mr. J. N. Moore, it was resolved that a minute of the proceedings and a copy of the resolution relating to the formation of a board and a separate district should be forwarded to the Secretary of State, and that a full minute of all the proceedings be forwarded to the members of the Coalowners' Association of the western district.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Dec. 26.—Business has been so thoroughly eclipsed this week by the Christmas festivities that our report is of necessity somewhat meagre. The iron mills and forges closed on Tuesday, and will be re-opened on Monday morning. This re-opening, however, will take place under certain conditions as to the rate of wages. The agreement supposed to regulate wages in the iron trade seems to be so vaguely worded that a dispute has arisen in regard to its interpretation, and as compromise the masters offer to continue the existing wages scale (on the basis of 12s. 6d. per ton for puddling) during the next six months, and in the meantime they promise a well-digested and explicit agreement for the future. The masters have, after two conferences, given this compromise as their ultimatum, and it is understood that all ironworkers who resume operations on Monday will do so on these terms.

The South Staffordshire Iron Trade shows a decided improvement, both in the pig and finished departments. The Earl of Dudley, Messrs. Barrows, and other leading firms, have issued circulars announcing that in the present unsettled condition of the market orders can only be accepted subject to special quotations. During the past fortnight a large number of orders (many of which had been held back in the hope of lower prices) have been suddenly placed upon the market. It is due to this circumstance that second-class firms are not only approximating their prices to those of the list houses, but are reluctant even at current rates to enter into long engagements: 11s. is the average price for second-class bars, the leading houses asking 12s., and Early Dudley 12s. 12s. 6d., with proportionate rates for all other descriptions.

The South Staffordshire Coal Trade continued in a very buoyant state up to the commencement of the holidays, and there is every prospect that the rates now ruling will be continued for some two or three months at the least, owing to the large demand for household fuel. It is, indeed, being hinted in some quarters that a further advance will be rendered necessary early in the new year by the extra expense in the working of mines which will be imposed by the new Act of Parliament. The nomination of "managers" under the Act is just now absorbing very general attention. The Cannock Chase Company are very heavily booked forward with orders on account of the new year. An extension of mining enterprise in this district in the direction of Huntington is making steady progress.

As to the Staffordshire Mines Drainage Scheme, the sketch we some time ago gave of the objects sought to be attained, and the means to be adopted in attaining those objects, has been confirmed as the correct basis of the Act for which application is to be made to Parliament by the draft bill that has been now duly lodged. That draft shows more than usual care in its preparation, and it is as clear and comprehensive as seems almost possible. There are certain details which may well be given here as supplementary to our earlier article—the more so as those details give additional value to the measure as at that time foreshadowed. And as it is only reasonable to conclude that the step which is being taken in the Mid-England coal field will form a precedent for similar action elsewhere, the leading features of the course that the Staffordshire men would pursue in their district have attached to them an importance which merits all the attention that can be bestowed upon it. The bill proposes to deal with all the surface water that affects the mines in the district sought to be benefited; the pumping out of the water already collected in mines still working, or in disused mines; and the preventing of the accumulation of water in any such mines, whether by percolation, or irrigation, or otherwise. The ordinary commissioners are to be appointed in office till the first Wednesday in August, 1876. Thereafter one-third retire annually by rotation, and the vacancies are filled up by the votes of owners and occupiers in the proportion of one vote for every 20 acres of mine owned or occupied, but no voter is to possess more than six votes. There are also to be official commissioners, such as the Chairman of Quarter Sessions of Staffordshire and Worcestershire, the Chairmen of the Ironmasters and of the Coalmasters' Associations especially, together with one director of the Birmingham and one of the Worcestershire Canal Company to be nominated and removed under the common seals of those companies. Thus it will be seen that the governing body is admirably representative in

one-thirtieth part of the whole amount borrowed. It will be attempted to pass this measure in the next session of Parliament; and so careful have the promoters been to propitiate those interests which might have been otherwise expected to give rise to opposition, that no great difficulty is expected to arise in the way of passing of the Act. The bulk of the traders in South Staffordshire have to be congratulated on the prospect there is before them of a considerable lengthening out of the fuel and other mineral treasures of their district. The necessity for some such measure as is here sketched has long been forcing itself upon them, and at no time with more force than in the past two years. All that time the area of mine under water has been increasing, and, because of the impossibility of effectually dealing with the water with existing appliances, workings are being abandoned there almost every week, and even where the water can be dealt with the cost is often very great. This may be imagined when we say that there are collieries at which, to our own knowledge, 26 tons of water have to be raised for every ton of mineral, whether marketable or refuse in its character.

Last week Lady Florence Leveson-Gower, daughter of the Duke of Sutherland, visited one of the Granville pits of the Lillehall Company, a few miles from Stafford. The young lady, who was accompanied by the Vicar of Lillehall and her governess, were conducted through the underground workings by Mr. E. Jones, the mining engineer to the company, and expressed herself highly pleased with her visit.

The contributions in aid of the sufferers by the Pelsall Hall mining disaster amount to £7000. The total sum needed to carry out the benevolent project of the committee is £4000, so that a deficiency of £7000 yet remains to be collected.

The North Staffordshire Iron Trade is decidedly better than reported for some time past. A large number of orders are offering, but makers accept them reluctantly in the present aspect of the trade. There seems to be little doubt that an improvement in price will be declared early in the new year. Pig-iron, NS brand, is steady, at 5/- 5s. net ton, most of the makers being pretty well sold.

Dreadful Explosion.—On Saturday night a terrible explosion took place in one of the pits of Messrs. Stanley and Co., of Silverdale, near Newcastle-under-Lyne. About 300 men altogether are employed in this colliery. Of these 20 were at the time of the accident working in what is known as the "Bullhurst seam," which is 400 yards from the surface. Shortly after seven, on the morning in question, an explosion took place in the Bullhurst seam, and so intense was the flame that it blazed so fiercely up the shaft as to destroy some of the fencing at the surface. The utmost consternation was caused at first, but this was to some extent allayed when it became known that the explosion was confined to the Bullhurst seam. As it was the results were terrible enough, eight men being killed outright and a number injured. The explosion was caused by one of the chartermasters having taken off the top of his lamp to relight another lamp which had blown out. In the same working, two years ago, 18 men were killed and many others severely injured by a similar explosion.

Wages in the Iron Trade.—The adjourned conference of the South Staffordshire ironmasters and ironworkers on the wages question, held at Wolverhampton, on Monday, did not result in any satisfactory settlement of the points in dispute. The masters laid down their offer of 12s. 6d. per ton as the rate for puddling during the next six months, as an *ultimatum*, and it is on the basis of these terms only that the works will be re-opened on Monday morning. The men seem disposed to stick out for what they regard as the terms of the compact made last July, but this compact is so vaguely worded that neither side appears able to understand it, and under these circumstances the men will do wisely in accepting the liberal compromise offered to them by the ironmasters. During the next six months a new method of adjusting the wages scale will most likely be introduced by the assistance of an experienced arbitrator.

THE METAL TRADES IN AUSTRIA.

Vienna, Dec. 24.—As usual during Christmas time, the trade in all sorts of metals is very quiet, and there is little or nothing of actual business to report.

Iron.—The Union Sheet Iron Manufactory of this town which until now, only possessed two works, the Johann Adolfshütte, near Judenburg, and Woellersdorf, near Wiener Neustadt, has acquired a third rolling-mill near Althofen, in Hungary, and is supposed to turn out in future, altogether, about 2500 tin-plates and 6000 tons sheet-iron per annum. Three entirely new companies in shares have been formed—the "Eisen und Maschinenfabrik Actien Gesellschaft," the "Österreichisch-Ungarische Eisengiesserei-Maschinen und Waggonfabrik-Aktion Gesellschaft," and the "Österreichisch-Ungarische Montan Gesellschaft." The object of this latter company is especially to make geological investigations in those parts of our country which are likely yet to hide mineral treasures of some sort or the other, and to promote the development of mining enterprise in general.

Copper without demand. Hungarian tough is offered at 51/- fl.; Mansfeld (superior quality for brass manufactory) at 31/- th.; Demidoff at 53 fl.; old brass fetches 36 fl.

Tin and Spelter are for the moment entirely neglected.

Lead remains in fair demand at steady prices. Silesian and Saxonian brands being paid 13/- fl.; Tyrolian at 13/- 1/-.

All prices of metals per 50 kilos, free at railway station, Vienna. The exchange for **Silver** is firm at 109 per cent.

THE COAL FIELDS OF GREAT BRITAIN.

In connection with the statistics of coal production, probably no name is better known than that of Mr. EDW. HULL, the director of the Geological Survey of Ireland, and the volume of which the third edition has just been issued* cannot fail to add largely to his reputation as a reliable authority upon the subject. The advance in our knowledge of the coal fields of nearly all countries since the first edition of the work was published has, as Mr. Hull remarks, been so great that the whole matter has assumed a new aspect. A great step towards completion has been made in the Government surveys of the British coal fields; in British India the Government surveys of the important coal fields lying along the valley of the Rivers Damoda and Nerbudda have been completed; whilst in Germany Profs. Geinitz and Fleck, and Dr. Hartig have published their elaborate treatise on the coal of Germany and other countries, and Dr. Hochstetler has described the coal deposits of New Zealand; and, lastly, the Royal Commissioners appointed to enquire into the coal resources of Great Britain have published their report.

The first evidence of a decreasing supply of coal will, Mr. Hull observes, be a sensible rise in the price, but through the agency of railways this will not become general until the resources of all the coal fields shall have become developed to their full capabilities, because where the supply shortens in one district a corresponding impetus will be given to mining in others now partially opened up. By way of illustrations, he mentions that many of us may live to see the southern half of the South Staffordshire coal field exhausted, or nearly so; but while this consumption is approaching the northern half of the same great coal tract is far from being developed to the extent of which it is capable. The interesting and instructive coal field of Coalbrookdale, in Shropshire, is fast approaching extinction as a coal-producing district. There is probably not more coal than will last for a quarter of a century at the present rate of consumption, but there is a neighbouring coal field, that of Denbighshire, capable of producing about five times its present supply. Between Brymbo collieries on the north, and those of Ruabon on the south, there is a large area well stored with coal which has only recently been disturbed. He explains that in speaking of the exhaustion of a coal field he does not use the term in an absolute sense. There will always be bands of coal, besides leavings, in the coal mines sufficient to afford a small supply to the immediate neighbourhood for domestic purposes. A coal field may be said to be exhausted when it is necessary to import largely from neighbouring districts for manufacturing and more general purposes.

That the British coal fields can never be utterly exhausted is now known, and the entire question of their workability at great depths appears to depend upon temperature, which it is assumed becomes greater as increased depth is attained; but this we consider is not yet satisfactorily proved. The estimates are based upon averages of results observed in various places, and under varying conditions; but these averages are really not justified, because the several observations have tended to show that there is no fixed increase—in fact, there are many mines in which the increase of temperature in the first 20 fms. sinking is quite as great as in the second or third 20 fms.; and it has frequently been found that neighbouring mines, apparently similarly circumstanced, vary widely in temperature at equal depths. The whole subject requires infinitely more investigation before any reliable conclusions can be drawn, or before anyone is justified in declaring that the 45,469,000,000 tons of coal lying at more than 4000 ft. deep are beyond our reach. Miners of former generations regarded the depths at which we now work to be quite as impracticable as geologists of the present day regard the greater depths which will hereafter be necessary.

Commencing with an interesting chapter of fragments in the history of coal mining, Mr. Hull proceeds to the consideration of the plants and animals of the carboniferous period, and notices that the perishable nature of plants under moisture or water is, perhaps, the principal cause of the fewness of the species preserved. For instance, there is every probability that there were grasses, mosses, and sedges, but of these we have scarcely a trace. It is, however, probable, that individuals of a few species prelaminated very largely, as is the case now in our pine forests, and in the great cypress swamps at the mouth of the Mississippi. He refers to the interesting experiment of Dr. Lindley, of immersing in water for two years plants representing those of the coal measures, which proved that dicotyledonous plants are in general incapable of resisting decomposition when immersed for two years, with the exception of the conifers; that monocotyledonous plants are less liable to decomposition by that in which grasses and sedges perish rapidly; and that fungi, mosses, and equisetums disappear, while ferns have a great power of enduring the effect of immersion being only to destroy all traces of fructification, a satisfactory reason why fossil ferns seldom present this portion of their structure, though the fronds themselves occur in great numbers, and in admirable preservation. Having given an ample sketch of the nature of coal and its origin, and the strata with which it is associated, the reader is well prepared for the consideration of the coal fields, to which the second part of the volume is devoted.

In the second part the South Wales, Bristol, and Somersetshire, Forest of Dean, Forest of Wyre, Shrewsbury, Coalbrookdale, North Wales, Staffordshire, Lancashire, and other coal fields are in turn referred to, and the views of Murchison, Jukes, Ramsay, Godwin-Austen, Prestwich, and the author are referred to and discussed, the part concluding with a general summary, from which it appears

* The Coal Fields of Great Britain, their history, structure, and resources, with notices of the coal fields of other parts of the world. By EDW. HULL, M.A., F.R.S., Third edition, revised and enlarged. London: Edw. Stanford, Charing-cross.

that there is a total quantity of 139,158,000,000 tons of coal available within a depth of 4000 ft., which at the rate of consumption of about 110,000,000 tons per annum, the quantity raised in 1870, would be sufficient to last for upwards of 1260 years. With regard to the statement that the produce of the coal fields is a variable and increasing quantity, we shall be better able to judge whether it is likely to be a constantly increasing quantity when we have had for a few years the more accurate statistics, which it may be anticipated will be obtainable from the compulsory returns demanded by the new Coal Mines Regulation Act. The various coal fields in other parts of the world are described, and their relative importance pointed out in the third part, whilst the fourth part is devoted to the questions of the limits of deep coal mining and the duration of the coal supply; and the concluding part treats of the physical geology of the carboniferous rocks, the origin of coal basins, and the distribution of the mesozoic formations.

So much information is contained in the volume that few will find it necessary to consult any other work upon the subject, in order to be enabled to thoroughly comprehend the whole matter, and judge of the relative value of the conclusions which have been arrived at by the various authors. The book is admirably illustrated with both plates and woodcuts, and is altogether valuable addition to the class of literature to which it belongs, and although published as a third edition has been so nearly re-written and so much enlarged that it may well be regarded as an entirely new work.

GOVERNMENT INSPECTION OF METALLIFEROUS MINES.

Reference has already been made to the annotated edition of the Coal Mines Regulation Act, prepared by Mr. JOHN WILLIAM HALL, solicitor, clerk to the Justices for the Bilston division of Staffordshire, and the same gentleman has now completed an edition of the corresponding Act—the Metalliferous Mines Regulation Act, 1872—which will prove extremely useful to a large number of the readers of the Journal. Mr. Hall explains that every mine in the United Kingdom has, by the legislation of 1872, been brought under inspection by Government Inspectors, and has been subjected to a variety of rules and regulations as to its operations whilst working, and even as to its care after abandonment, or discontinuance of working. This legislation divides itself into two distinct Acts—the one dealing with mines liable to generate inflammable gas, the other with mines not thus liable. The Metalliferous Mines Regulation Act includes all mines in Great Britain and Ireland (except those of shale, coal, fire-clay, and stratified iron-stone), including salt, limestone, and any substance whatever worked by mining. The mines to which this Act relates have hitherto been free from inspection, and subject to no legislative interference except as to regulating employ of boys, and prohibiting employ of females below ground, fixing age of engine-winders or gin drivers, and prohibiting payment of wages in pie-houses.

In the treatment of the subject Mr. Hall has endeavoured to give such explanations, directions, and hints, as the novel application seems to render desirable, and thus adapts his book to the requirements of practical men generally. Some provisions are quite a novelty, and many seem at first somewhat startling; for instance, that in case of any offence "by any person whomsoever," the owner and agent shall each be *prima facie* deemed guilty thereof. The provisions as to fencing of shafts and surface entrances to mines (whether in work or discontinued) are new and of no small significance, both as to civil and criminal liability, if not duly observed; and invite consideration of the previous law as to fencing, and how far varied and rendered more onerous by the Act, which again has led to a brief notice of the law as to employers' liability for accidents to the employed, and how occasioned by act of a fellow servant in course of common employ.

As the book is one which must be the constant companion of the miner, at least, until the provisions of the new law be thoroughly known to him, and Mr. Hall would, therefore, seem to have acted wisely in issuing it in pocket-book form and at a moderate price. Arrangements will be made for obtaining it from the *Mining Journal* office as soon as the copies are bound, which will be in course of a few days.

SURFACE RIGHTS, AND MINING OPERATIONS.

The great mining case of "Hext v. Gill" resulted on appeal (20 W. R. 957) in a not unusual dead-lock. The Lords Justices agreed with the Vice-Chancellor (20 W. R. 520) as to the more extended meaning of the term minerals, holding that the reservation of all mines and minerals, with liberty to work the same, from a grant by the Duchy of Cornwall to the plaintiffs' predecessor in title included the valuable article of commerce known as kaolin, or china-clay. So far the decision was in favour of the defendants, who were the parties entitled to the benefit of the reservation. But the Lords Justices went on to decide (wherein they differed with the Vice-Chancellor) that the defendants were not at liberty so to work the china-clay as to destroy the surface. As this was the only practical mode of getting the china-clay, the result was exactly that anticipated by Lord Campbell in "Humphries v. Brogden" (12 Q. B. 745)—that neither party could work the china-clay—not the plaintiff, because it was included in the reservation to the defendant, or the defendant, because he could not raise it without disturbing the surface, and that he had no right to do.

There is no reason why in a reservation of such a character as that in "Hext v. Gill" the term minerals should not *prima facie* receive the more extended meaning of the term, which would include china-clay when found under the surface. In saying that the word mineral includes everything that can be got from under the surface of the earth for the purpose of profit, unless there is something in the context or nature of the transaction which would induce the Court to give it a more limited meaning, Lord Justice McIlhenny adopted in substance the definition of the Master of the Rolls in a recent case, where his lordship said that everything except the mere surface, which is used for agricultural purposes, is a mineral; anything beyond that is useful for any purpose whatever, whether it is gravel, marble, fire-clay, or the like, comes within the word minerals when there is a reservation of the mines and minerals from a grant of land ("Midland Railway Company v. Checkley," 15 W. R. 741, L. R. 4 Eq. 19").

The chief value of "Hext v. Gill" is its bearing on the questions which may arise as to the working of the minerals where the surface belongs to one owner and the minerals to another. We have already noticed the decision of the Vice-Chancellor (16 S. J. 650). His Honour felt the difficulty of attributing a meaning to the language of the reservation which might have the effect of derogating from the previous grant, yet he could see no way of giving effect to the words, "with liberty to work the same," except by holding that such words enabled the defendant to get the china-clay by surface working, since that was the only practicable mode of getting it. This, and the circumstance that streaming for tin—a process equally destructive of the surface—must have been in the minds of the parties, was probably the ground of the decision. The Lords Justices considered that the words of the reservation only entitled the defendants so to work the minerals as not to destroy the surface, and entitled an injunction restraining the defendants from getting the china-clay by surface operations.

It may be objected that the above decision had the practical effect of restricting the meaning of the word mineral to substances gotten by shafts or adits, as distinguished from quarrying or surface working; but it is an elementary principle that a reservation is not to be construed so as to destroy a previous grant. A saving repugnant to the purview of the instrument is void ("Riddell v. White," 1 A. St. 251). The decision in fact follows "Bell v. Wilson" (14 W. R. 493, L. R. 1 Ch. 305), where the reservation was couched in similar language, and the Lords Justices held that the word minerals included freestone, but that the grantor had liberty only to get it by underground mining, and not by working in an open quarry.

We need not cite any authority to show where the surface belongs to one owner and the minerals to another. We have already noticed the decision of the Vice-Chancellor (16 S. J. 650). His Honour felt the difficulty of attributing a meaning to the language of the reservation which might have the effect of derogating from the previous grant, yet he could see no way of giving effect to the words, "with liberty to work the same," except by holding that such words enabled the defendant to get the china-clay by surface working, since that was the only practicable mode of getting it.

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for damages, it was held that it did not authorise working in derogation of the surface owner's right to support ("Smart v. Morton," 3, W. R. C. L. Dig. 156, 5 E. and B. 30). With reference to the question whether a custom enabling the owner of minerals to work as to let down the surface would be good, we have already pointed out that "Hilton v. Earl Granville" (*sup.*) is a case of questionable authority. It was there decided that a custom to work mines in such a manner as to let down the surface, paying only to the occupier of the surface compensation for the use of, or damage to, the surface itself, is not a reasonable custom. In an early case it was held that a custom for the lord of the manor to dig clay pits, and remove the clay, 411, and if so, why may not a custom for him to get the minerals without protecting the surface from subsidence be good?

As the surface owners' right to support is absolute, it follows that if enough be not left to support the service in fact, no defence arises from the circumstance that the mines have been worked in a reasonable manner ("Humphries v. Brogden," 5 T. R. 411), and if so, why may not a custom for him to get the minerals without protecting the surface from subsidence be good?

AUSTRALIAN COAL.

The growing importance of the Australian coal traffic with China is beginning to attract the attention of home writers, and in a recent article some sound advice has been given to merchants engaged in the Eastern coal trade. The recent alarming rise in the price of English coal has brought Australian rates into bright relief, the difference between those ruling in the two countries amounting to nearly 50 per cent. in favour of the latter. There appears at present to be little hope of any decrease in the home price, more especially in view of the great continental demand now existing, which is not likely to cease. Against this we have the offer of coals of a not inferior quality at half the cost and less than a fourth of the distance to travel. That a trade under such conditions is worth cultivating needs no demonstration. The only wonder is, as pointed out by our home contemporary, that so little seems to have been done to establish it upon a secure basis. Hitherto we had to rely mainly upon chance, a chance which has seldom failed us, but a chance nevertheless. Vessels arriving in Australia from England will, if nothing better offers, take a coal freight for China, but this only when times are dull. There are certain seasons in each year when shipping is in demand for the home trade, to say nothing of the wool trade, which alone employs a considerable fleet during the busy season. The actual amount of employment offering, of course, fluctuates, and a good season for home freights deprives the China coal trade of a good deal of tonnage. No doubt there has of late been a much greater tendency than heretofore to rely upon coal freights, but at best the supply of ships is not equal to the demand. The question raised by the article above refers to a well-known Lambton Colliery, the property of the Scottish Australian Mining Company.

The preference given to the Lambton coal over that brought from

TO INVENTORS AND PATENTEES OF TUNNELLING AND COAL-GETTING MACHINES.

A COLLIER COMPANY in NORTH WALES, having sunk their pits to the coal, are desirous of EMPLOYING MACHINERY for the purpose of MORE RAPIDLY DRIVING THEIR MAIN WAGON ROADS and RETURN AIR COURSES, the seam being about 7 feet thick.

Mr. HENRY DENNIS, HAFOD-Y-BWCH, RUABON, will be glad to receive PLANS and SPECIFICATIONS of such MACHINES, the COST, and the NECESSARY APPLIANCES to WORK the same.

COUNTY OF DONEGAL, IRELAND.

TO BE SOLD, EIGHT TOWNLANDS, containing above NINE THOUSAND ACRES. MOCKISH GLASS SAND. SLATES and IRON ORE are found on this property.

Please apply to the Rev. A. NIXON, Clones.

PRINCE PATRICK SILVER-LEAD MINING COMPANY (LIMITED).

The FIRST DIVIDEND will be PAID, at the rate of TEN PER CENT. PER ANNUM (free of income tax), on 31st December Inst.

By order. THOMAS HUGHES, Secretary.

59, Seel-street, Liverpool.

DELAWARE AND HUDSON CANAL COMPANY SIX PER CENT. DEBENTURES OF 1875.

Notice is hereby given, that the COUPON due January 1st next on the Loan of £200,000, issued through Messrs. Gilead A. Smith and Co., will be PAID by the IMPERIAL BANK (LIMITED), No. 6, Lothbury, on and after that date.

Coupons must be left one clear day for examination.

MINERAL HILL SILVER MINES COMPANY (LIMITED).

The directors beg to give notice that, at an Extraordinary General Meeting of Shareholders, held on the 24th instant, it was resolved—

"That the COMPANY should be voluntarily WOUND-UP, and Mr. Turquand (of the firm of Messrs. Turquand, Young, and Co.) was appointed liquidator."

Under these circumstances, the DEBENTURE INTEREST, due on 1st January, WILL NOT BE PAID.

By Order, CHARLES HURLBATT, Secretary.

THE RUSSIA COPPER COMPANY (LIMITED).

Notice is hereby given, that the ADJOURNED GENERAL MEETING of this company will be HELD on TUESDAY, the 7th day of January next, at 5, Queen-street place, in the City of London, E.C., at Twelve o'clock noon, but will only be held, pro forma, for the purpose of further adjourning such General Meeting to an early day in February next, at such an hour and place as may be fixed by the directors.

The auditors have notified that it will be impossible to have the accounts prepared by the 7th proximo, and that, therefore, it will be necessary to adjourn the meeting as proposed.

By order, CHARLES HURLBATT, Secretary.

Dated this 23rd day of December, 1872, 5, Queen street place, London, E.C.

PRUSSIAN MINING AND IRONWORKS COMPANY (PREUSSISCHE BERGWERKS-UND-HUTTE-ACTIEN-GESELLSCHAFT).

PAYMENT OF DIVIDEND.

At the last GENERAL MEETING of shareholders, held on the 21st September A.C., the DIVIDEND for the business year, 1871-72, was fixed at

10 PER CENT.=£5, or 20 thalers, per share,

Of which the sum of £1 16s. per share has already been paid as a dividend on account. The rest dividend, being £1 4s.=8 thalers per share, is PAYABLE from and after the 2nd of January, 1873, at the offices of the company, in Dusseldorf, or in—

BERLIN, with the Berliner Handels-Gesellschaft,
BREMEN, with Messrs. H. H. Meier and Co.,
HAMBURG, with the Norddeutsche Bank,
LONDON, DUBLIN, with the National Bank,
CORK.

In exchange for the Dividend Coupons No. VI.

The coupons are to be accompanied upon presentation with a list, showing the numbers in arithmetical order.

THE DIRECTION.

Dusseldorf, the 23rd December, 1872.

THOS. J. MULVANY.

PRUSSIAN MINING AND IRONWORKS COMPANY (PREUSSISCHE BERGWERKS-UND-HUTTE-ACTIEN-GESELLSCHAFT).

PAYMENT OF INTEREST UPON PARTIAL OBLIGATIONS.

The INTEREST upon our PARTIAL OBLIGATIONS for the FIRST HALF of the business year 1872-73 is PAYABLE from and after the 2nd of January, 1873, with FIFTEEN SHILLINGS PER COUPON,

At the offices of the company in Dusseldorf, and at the other places mentioned above, upon presentation of the interest coupon No. V., which shall then be stamped and returned to the holder, to be given up later upon payment of the second half-year's interest after the 1st July, 1873.

The coupons are to be accompanied upon presentation with a list showing the numbers in arithmetical order.

THE DIRECTION.

Dusseldorf, the 23rd December, 1872.

THOS. J. MULVANY.

FOR THE UTAH MINES.

PERSONS WISHING ACCURATE INFORMATION concerning the MINES and MINING DISTRICTS in UTAH should BUY FROISETH'S NEW MINING or SECTIONAL MAP OF UTAH, for sale by TRUBNER and Co., Paternoster-row, London, E.C.

MINING SHARES FOR SALE, in consequence of the Proprietor leaving Scotland, and must be SOLD FOR CASH to the highest bidder:—

25 C-steel an Dinas (Tin) shares ... 42 0 0 each, fully paid, ex dividend.

50 Wheal Mary (Tin) ... 1 0 0 each paid.

10 East Llanyngog ... 1 17 0 paid.

50 Castle Gate ... 1 0 0 each, fully paid.

10 Patent Gas ... 4 0 0 each paid.

50 Tuolumne (Gold) ... 2 0 0 each, fully paid.

And several small lots, particulars of which may be had by applying to Mr. McClymont, Lochfield Villa, Castle Douglas, N.B.

MESSRS. VALENTINE AND CO., BANKERS, BROKERS, AND FINANCIAL AGENTS, having PURCHASED the GOODWILL of the BUSINESS of the OPEN STOCK EXCHANGE (LIMITED), have REMOVED to NOS. 17 and 18, CORNHILL, E.C., where they will be pleased to receive the orders of their friends for the PURCHASE and SALE of SECURITIES of all kinds, and generally to attend to any Banking or General Business that may be entrusted to them.

PUBLIC SALES by AUCTION of STOCKS and SHARES are held every TUESDAY at the Auction Mart, Tokenhouse yard, Lothbury, at 12 30 P.M. punctually. Catalogues of these sales may be had at the Mart, or at the offices, 17 and 18, Cornhill, on the previous Saturday.

Messrs. VALENTINE and Co. also issue a Weekly Circular, which is sent free to their clients, containing copious information on Money Market and Stock Exchange matters.

MESSRS. LISCOMBE AND CO., 39, SOUTH CASTLE STREET, LIVERPOOL. Beg to inform their CLIENTS and the PUBLIC that they are PREPARED to do BUSINESS in ALL CLASSES of MINING SHARES—English, Foreign, and Colonial—at the closest market prices.

COMPENSATION CLAIMS ADJUSTED, BOOKS AND ACCOUNTS KEPT in ORDER, PERIODICAL STATEMENTS or BALANCE SHEETS PREPARED, and COMPETENT CLERKS PROVIDED to WORK UP ARREARS, or render TEMPORARY ASSISTANCE, at moderate charges; also, DEBTS and RENTS COLLECTED, with promptitude and dispatch, by—

R. M. RING AND CO., ACCOUNTANTS AND FINANCIERS,

38, BUCKLERSBURY, CITY, E.C.

CAPTAIN ABSALOM FRANCIS, GOGINAN, ABERYSTWITH, MINING AGENT, ENGINEER, and SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induce him to offer his services either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

CAPT. ROBERT KNAPP, MINING ENGINEER AND SURVEYOR, having recently returned from Nevada, where he has added seven years' experience in Silver Mining to his former extensive and varied experience in this country, is prepared to RECOMMEND to INTENDING INVESTORS several VERY VALUABLE MINING PROPERTIES, selected from close personal inspection, and at unusually low rates. And also to INSPECT and REPORT on other MINES in NEVADA, or other States on the Pacific Coast.

Address, Liskeard, Cornwall.

MESSRS. THOMAS BORLAZE AND CO., MINERAL, ENGINEERING, FINANCIAL, and GENERAL AGENTS.

Previously announced their readiness to INSPECT, VALUE, REPORT, and ADVISE, confidently, INVESTORS on any matter in the above capacities. Unquestionable references and securities offered where required.

OFFICES,—ST. AUSTELL, CORNWALL.

M. CHARLES F. COLLOM, MINING ENGINEER, INSPECTOR OF MINES, &c.

TAVISTOCK.

MANAGEMENT OF THE SOUTH DEVON FIRE-CLAY COMPANY.

Patentee of COLLOM'S PATENT REVOLVING FRAME for DRESSING TIN, AMALGAMATING GOLD, &c.

INVESTMENTS IN MINES ARRANGED FOR CAPITALISTS.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GREAT WESTERN MINES MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 24th day of December instant, presented to the Vice-Warden of the Stannaries by Robert Glasson Michel, a creditor and also a contributory of the said company, and that the said petition is directed to be heard before the Vice-Warden, at the Prince's Hall, Truro, in the county of Cornwall, on Wednesday, the 8th day of January next, at Eleven o'clock in the forenoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his solicitor, or agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., Secretary of the Vice-Warden, Truro.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the petitioner, his solicitor, or agents, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's office, Truro, on or before Monday, the 6th day of January next, and notice thereof must at the same time be given to the petitioner, his solicitor, or agents.

TUFNELL SOUTHGATE, 7, King's Bench Walk, Temple, London.

(Solicitor for the Petitioner.)

HODGE, HOCKIN, AND MARRACK, Truro.

(Agents of the said Solicitor.)

Dated Truro, 26th day of December, 1872.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL ROSE MINING COMPANY.—By the direction of His Honor, the Vice-Warden, notice is hereby given, that on Tuesday, the 7th day of January next, at Eleven o'clock in the forenoon, at the Registrar's Office, at Truro, in the county of Cornwall, this Court will PROPOSE to MAKE a CALL of SIXTEEN SHILLINGS PER SHARE on all the Contributors of the said company settled on the List of Contributors of the said company present members thereof.

All persons interested therein are entitled to attend at the time and place to offer objections to such call.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, 26th day of December, 1872.

TO COAL MASTERS AND OTHERS INTERESTED IN MINING.

THE UNWORKED PORTIONS of the LOWER MINES in the ESTATE belonging to Sir G. H. BEAUMONT, Bart, at COLEORTON, in the county of LEICESTER, containing SEVERAL HUNDRED ACRES, are now OFFERED TO CAPITALISTS, and may be made the subject matter of treaty by lease.

These mines are now worked extensively in the neighbourhood, and command a ready market for steam and household purposes. The estate communicates with the Midland Railway by the line of the Coleorton Railway, and the line of the Derby and Ashby-de-la-Zouch Railway, and so is most favourably situated for the development of the coal field.

Application for permission to view may be made to Mr. E. FISHER, Solicitor, Derby;

or to Mr. J. T. WOODHOUSE, Civil and Mining Engineer, Derby.

TO IRONMASTERS, &c.

TO BE DISPOSED OF, the LEASE for 42 years, of a VALUABLE IRONSTONE ROYALTY, in the heart of the CLEVELAND DISTRICT, with shafts sunk, and the stone opened up, and ready for immediate realisation—being within 20 yards of the main line of rails to Middlesbrough; its position and instant profitable working is unquestionable.

Apply to Mr. WATSON, 15, Fenwick-street, Liverpool.

SPLENDID OPPORTUNITY FOR SMALL CAPITALISTS. FOR SALE, a FREEHOLD BEST FIRE-CLAY and TERRACOTTA WORKS, complete, with nearly new plant for grinding and working the clay, steam-engine, drying sheds, kilns, &c.; capable of producing 22,000 bricks weekly. It is situated in the midst of other flourishing like works, with coal at low figures, and has rail and water accommodation on the site itself. The clay produces the most superior white-facing bricks, ornamental terra-cotta works, &c. With £800 an energetic man can here make a genuine fortune.

Apply to Mr. WATSON, 15, Fenwick-street, Liverpool.

RARE OPPORTUNITY FOR MAKING A FORTUNE.

TO BE SOLD, PART or ENTIRE (former preferred) of a COLLIER ROYALTY in NORTH WALES, bordering on the London and North-Western Railway, and close to a shipping port. There are several shafts partially sunk, some requiring to be sunk still deeper, but operations stopped for want of capital. There are four seams of good house and steam coal proved in an area upwards of 400 acres of surface. Holder will sell the entire, including the present plant (not sufficiently powerful for sinking further) for £4000, but would prefer taking a PARTNER, who would advance the necessary capital for half profits, which in the present state of the coal trade are almost fabulous.

Address, "Vulcan," care of Mr. Watson, 15, Fenwick-street, Liverpool.

MINERALS TO BE LET.

TO BE LET, BY TENDER, all the MINERALS above, and including the No. 3 RHONDDA SEAM, lying under the several Farms, called Codd-y-lay, Tyn-y-coed, Llanlid, Tylcha wen, Gelly seren, and Ton trathwg, situate in the several parishes of LLANLID and LLANTHRISSANT, in the ELY VALLEY, GLAMORGANSHIRE, containing together by admeasurement 587 acres or thereabouts.

The property is most advantageously situated, being only distant 16 miles by the present route from the port of Cardiff, with which the property is connected by means of the Ely Valley Railway, running through the lands, and forming a junction with the Great Western Railway at Llantrisant, thus affording direct communication with all parts of the kingdom. The ports of Newport and Swansea are also easy of access by means of the above-mentioned route.

The Llantrisant and Taff Vale Junction Railway, now in course of construction, runs within two miles of the property, and when opened will, with the Ely Valley Railway, greatly reduce the distance to Cardiff, and afford greater facilities for the conveyance and shipment of the minerals to be worked from this property, which contains the whole of the mineral seams in the South Wales basin underlying the Llantrisant Seam.

This mineral property, from its advantageous position, is the key to a very large area of minerals lying to the rise of the level course; and being the only practicable outlet for such minerals, it will enable the same to be worked to greater advantage than from any other quarter.

Sealed tenders to be sent to Messrs. DAVIES and CO., Solicitors, Haverfordwest on or before the 31st day of December, 1872.

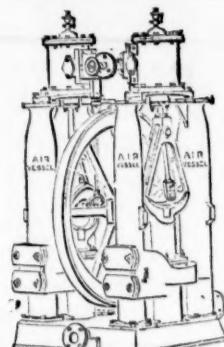
Fall particulars and terms of letting can be had on application to Mr. HERBERT KIRKHOUSE, Mineral Engineer, Mass Merlin, Neath; or to—

Messrs. DAVIES AND CO., Solicitors, Haverfordwest.

LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBERLAND.

TO BE LET, ON LEASE, with immediate possession, the HUNSTANWORTH and NEWBIGG ROYALTIES the former about 3534 acres and the latter 200 acres, or thereabouts.

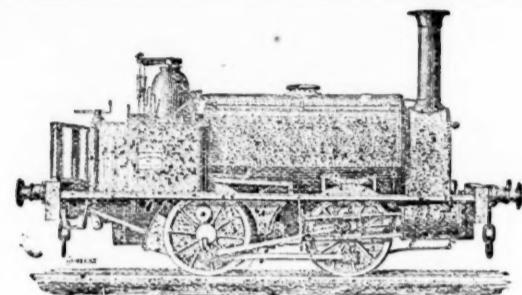
The Hunstanworth Royalty adjoins the celebrated W.B. Lead Mines, and has for many years yielded large quantities of lead ore, and much of the ground is undeveloped.



JOHN CAMERON,

MAKER OF
STEAM PUMPS, PORTABLE ENGINES, PLATE BENDING ROLLERS,
BAR AND ANGLE IRON SHEARS, PUNCHING AND SHEARING
MACHINES, PATENTEE OF THE DOUBLE CAM LEVER
PUNCHING MACHINE, BAR SHEARS, AND RAIL
PUNCHING MACHINES,

EGERTON STREET IRON WORKS,
HULME, MANCHESTER.



TANK LOCOMOTIVES,

FOR SALE OR HIRE.

HENRY HUGHES AND CO.,
LOUGHBOROUGH.

THOMAS TURTON AND SONS,

MANUFACTURERS OF
CAST STEEL for PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CON-
NECTING RODS, STRAIGHT and CRANK
AXLES, SHAFTS and
FORGINGS of EVERY DESCRIPTION.
DOUBLE SHEARSTEEL
BLISTER STEEL, T. TURTON
SPRING STEEL, EDGE TOOLS MARKED
GERMAN STEEL, WM. GRIFFITHS & SON
Locomotive Engine, Railway Carriage and Wagon
Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock of steel, files, tools, &c., may be selected from.

BOHLKEN'S Improved PATENT EARTH BORERS.

THE BEST TOOL FOR BORING HOLES
in the GROUND, to any depth, supplied in
large quantities to CONTRACTORS, RAILWAY COMPANIES,
BUILDERS, DOCKYARDS, &c., in GERMANY,
RUSSIA, AUSTRIA, and HUNGARY.
All sizes, from 2 inches to 18 inches diameter, kept in
stock by the Patentee.—

M. SELIG, JUN.,
70 and 71, BISHOPSGATE STREET WITHIN,
LONDON, E.C.

JOHN AND EDWIN WRIGHT,

PATENTEE,
(ESTABLISHED 1770.)
MANUFACTURERS OF EVERY DESCRIPTION OF
IMPROVED

PATENT FLAT AND ROUND WIRE ROPES
from the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES,
SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON-
DUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's
patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE,
TARPAULIN, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.
CITY OFFICE, No. 5, LEADENHALL STREET, LONDON, E.C.



By a special method of preparation, this leather is made solid, perfectly close in
texture, and impermeable to water: it has, therefore, all the qualifications essen-
tial for pump buckets, and is the most durable material of which they can be made.
It may be had of all dealers in leather, and of—

I. AND T. HEPBURN AND SONS,
TANNERS AND CURRIERS, LEATHER MILLBAND AND HOSE PIPE
MANUFACTURERS,
LONG LANE, SOUTHWARK, LONDON.
Prize Medals, 1851, 1855, 1862, for
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.

Now ready, a new and enlarged edition of
HIBBERT'S NEW THEORY and PRACTICE of MEDICINE,
Vol. I. being a treatise on the Nature, Cause, Cure, and Prevention of
Disease in Human Beings; Vol. II. on Animals. In paper cover, 1s.; bound in
cloth, gold lettered, 2s. each.
Published and sold by JOHN HEYWOOD, Manchester; and SIMPKIN, MARSHALL,
and CO., London.

HIBBERT'S PATENT ANTISEPTIC, for stamping out Small
Pox, Cholera, Fever, and all Fermentive Inflammatory Diseases. May be
obtained through any Chemist, in bottles, price 1s. 1½d., and upwards.
W. HIBBERT, Cheetham, Manchester.

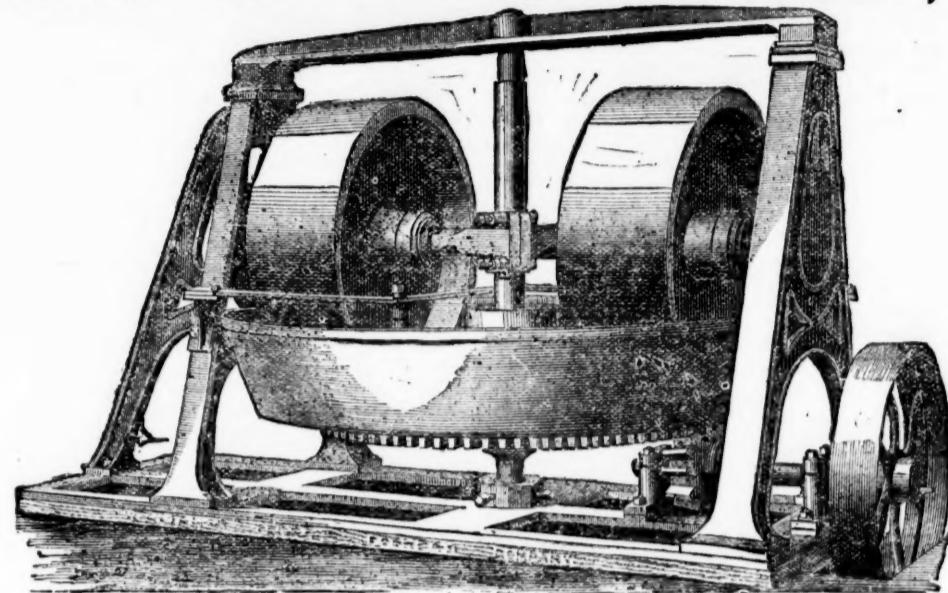
THE NEWCASTLE CHRONICLE AND NORTHERN
COUNTIES ADVERTISER. (ESTABLISHED 1764.)
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North
Shields; 195, High-street, Sunderland.

SPECIAL PAMPHLET ON NERVOUS DEBILITY.—
Read a Guide to the Cure of Nervousness; on the Special Treatment of Nervous, Mental, and Physical Debility, Loss of Spirits, Dimness of Sight, Indigestion, &c. Illustrated with cases. Gives rules for care by the New Medicines. Dr. SMITH will, for the benefit of country patients, on receiving a description of their case, send a letter of advice GRATIS. Pamphlet free by post in an envelope on receipt of two stamps.—DR. SMITH, 8, Burton-crescent, London, W.C.

BARROWS & STEWART, ENGINEERS,

MANUFACTURE

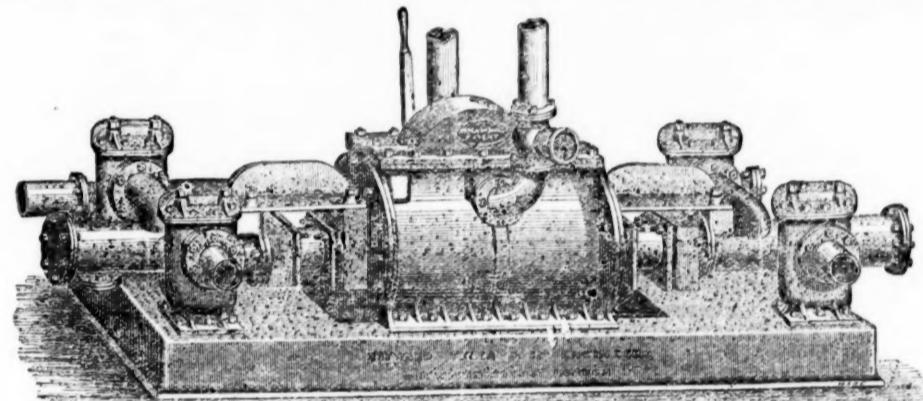
PORTABLE STEAM ENGINES, WITH GEAR FOR WINDING, PUMPING, AND ORE CRUSHING, BUILDERS' AND CONTRACTORS' PLANT, &c.



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HAYWARD TYLER AND CO.'S PATENT STEAM PUMPING MACHINERY.



The great success of HAYWARD TYLER and CO.'S PATENT "UNIVERSAL" STEAM PUMPS, may be seen from the following Testimonial, in addition to many others in their possession.

TESTIMONIAL.

HAYDOCK, ASHTON EDGE GREEN, AND PARK COLLIES, near ST. HELEN'S, LANCASHIRE, October 18th, 1871.
GENTLEMEN.—We have one of your "UNIVERSAL" STEAM PUMPS continuously at work during the last ten months, and it does its work very well. It is suspended in a new shaft 50 yards deep, the steam to supply it being generated on the surface of the ground. Yours truly,

(Signed)

RICHARD EVANS AND CO.

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THE HOWARD SAFETY BOILER, HUNDREDS ARE NOW IN USE, AND THE DEMAND IS UNPRECEDENTED.

Some of its advantages:—

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HIGH-PRESSURE STEAM, WITH ECONOMY OF FUEL.

PERFECT CIRCULATION, AND READY MEANS OF REMOVING SEDIMENT.

SAVING OF COST AND TIME IN REPAIRS.

PORTABILITY, AND, FOR EXPORT, GREAT SAVING IN FREIGHT.

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For particular kinds of Machinery, the Oil may be specially prepared of a consistency and character adapted to the nature of the work to be done.

"Chemical Laboratory, 7, Printing House-square, Blackfriars, April, 1869.
I herewith certify that the Rangoon Engine Oil, manufactured by Messrs. Chas. Price and Co., is free from any material which can produce corrosion of the metal work of machinery. It is indeed calculated to protect metallic surfaces from oxidation.

"The lubricating power of this oil is equal to Sperm or Lard Oil.

"T. W. KEATES, F.C.S., &c. &c.

Every parcel of the Oil sent from the work bears the Trade Mark of the Firm.

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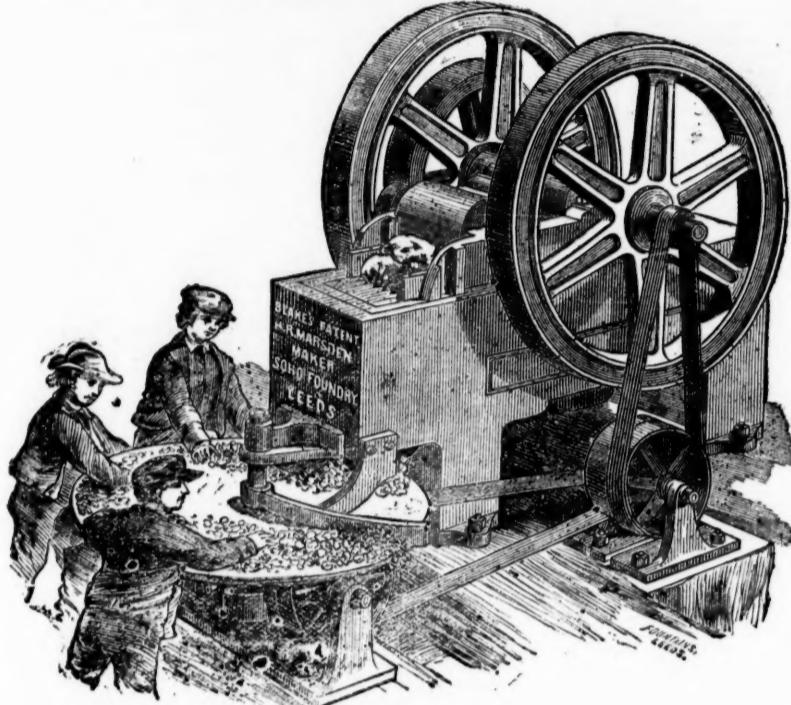
AWARDED TWENTY GOLD AND SILVER FIRST-CLASS PRIZE MEDALS.

IMMENSE SAVING OF LABOUR
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT
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OR ORE-CRUSHING
MACHINE,**FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF
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This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester, and at the Highland Agricultural Society's Show at Edinburgh, where it broke 1½ ton of the hardest trap or whinstone in eight minutes, and was AWARDED TWO FIRST-CLASS SILVER MEDALS. It has also just received a SPECIAL GOLD MEDAL at Santiago, Chili.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.

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(exclusive of power
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And are at present successfully employed in lengths from a quarter of a mile to fourteen miles in transport of coal, ironstone, fire-clay, coke, general mining produce, beetroot, sugar-cane, &c. They are working in most difficult and mountainous districts, where any other means of transport is impossible, as well as through ordinary country.

ABOUT SEVENTY LINES HAVE ALREADY BEEN CONSTRUCTED.

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Are PREPARED to SURVEY and ESTIMATE for LINES and EXECUTE CONTRACTS at HOME and ABROAD. They have engineers employed in constructing these lines in England, Holland, Prussia, Austria, Russia, Italy, Spain, United States, Peru, Chili, River Plate, India, Bolivia, West Indies, and Egypt. The system has been adopted by the English and Anglo-Indian Governments, the Spanish and Prussian Governments, and for many of the first mines and ironworks at home and abroad.

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**PATENT STEAM EARTH-BOARING MACHINES
FOR
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Capable of BORING HOLES from 6 to 36 in. diameter, and to any depth to 2000 ft.

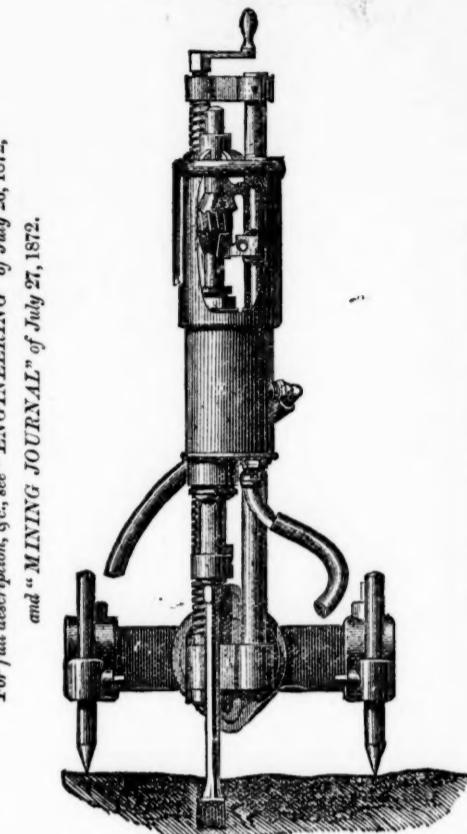
Price, and terms of hiring, may be obtained from the Patentees,—

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LARGE PUMPS, PUMPING ENGINES, WINDING ENGINES, &c.****McKEAN'S ROCK DRILL,**FOR MINES, TUNNELS, QUARRIES, AND SUBMARINE WORK,
500 TO 1000 STROKES PER MINUTE

(counted by mechanism).

PENETRATES GRANITE 6 TO 12 INCHES PER MINUTE.

MACHINES WARRANTED.



For full description, &c., see "MINING JOURNAL" of July 26, 1872.

and "MINING JOURNAL" of July 27, 1872.

These machines are manufactured for McKeans and Co. by

MESSRS. P. AND W. MACLELLAN, "CLUTHA IRONWORKS,"
GLASGOW;MESSRS. VARRALL, ELWELL AND MIDDLETON, PARIS;
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SMALL PORTABLE BOILERS, or AIR COMPRESSORS, furnished, if required; the latter with GIFFARD'S FRICTIONLESS VALVE PISTON.

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Circulars sent free.

N.B.—McKEAN and Co. are sole agents for M. GIFFARD'S FRICTIONLESS VALVE PISTON, for Pumps, Air Compressors, &c., giving a larger percentage of yield than any other system.

**BARKER'S IMPROVED FUEL
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SUITABLE FOR ALL PURPOSES FOR WHICH COAL IS USED.

This fuel, made from dust coal, gives in use results superior to the best coal; it is thoroughly water proof, stacks without liability to spontaneous combustion, loss, or deterioration on board ship, or in any climate, and in 30 per cent. less space than coal.

An immense saving is effected by its use on sea-going steamers, owing to its high evaporative power, requiring one-third less stowage room, and avoiding all risk of spontaneous combustion. It burns with little smoke, forming itself into coke; it is very durable, the combustion is perfect, and it will not fall or disintegrate in great heat before a blast or strong draught, nor does it produce cinder.

It will bear rough usage and handling without breakage.

As regards the manufacture, it is easily and cheaply made; the machinery made is simple, effective, and comparatively inexpensive.

No heavy pressure is required, or exposure to heat after moulding, to dry or coke (as is usual); and after mixing, the blocks could, if desired, be made up by hand labour; but for large production, self-acting machinery is recommended; and when moulded, the fuel is at once ready for use or transit.

Works are in operation in London, and can be viewed on application.

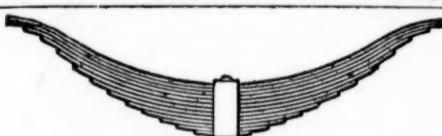
Intending licensees can send their coal and have it made up into fuel in their own presence, and have it returned to them for trial.

Samples on a large scale suitable for every purpose supplied for trial. The proprietors of the patents are prepared to grant licenses, and would, if desired, undertake contracts to provide machinery, erect works, and put the same into satisfactory operation, on any required scale of manufacture.

Application to be addressed to the patentees—

Mr. DAVID BARKER, Oldbury House, Northfleet, London; or

Mr. THOS. D. CLARE, 13, St. Mary's Row, Birmingham.

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RAILWAY SPRINGS.



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BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid
1500 Alderley Edge, c, Cheshire*	10 0 0	—	11 1 8	8 5 0	Oct. 1872	5 0 . . .	Oct. 1872
5500 Blue Caen, s-l, Cardigan* (24 sh.)	3 5 0	—	6 10 9	8 5 0	Oct. 1872	4 5 0 . . .	Oct. 1872
13000 Boscastle Downs, t, c, St. Just*	3 0 0	3 1/4	3 3 1/4	0 5 6	Oct. 1872	2 0 0 . . .	Oct. 1872
2000 Bodilack, t, c, St. Just	91 5 0	—	619 15 0	5 0	Aug. 1872	5 0 0 . . .	Aug. 1872
5000 Bronllyd, s-l, Cardigan*	100 0 0	—	65 75	110 0 0	Feb. 1872	2 4 6 . . .	Feb. 1872
4000 Brookwood, c, Buckfastleigh	1 16 0	—	—	—	Oct. 1872	1 16 0 . . .	Oct. 1872
858 Carrig, s-l, Newlyn	18 15 7	—	—	—	Oct. 1872	2 18 0 . . .	Oct. 1872
6400 Cashwell, t, Cumberland*	2 10 0	—	—	—	Oct. 1872	1 4 0 . . .	Oct. 1872
5000 Castle-an-Dinas, t, St. Columb	2 0 0	2 1/4	2 2 1/4	0 6 0	July 1872	2 0 0 . . .	July 1872
1000 Curn Brea, c, t, Illogan	35 0 0	155 1/4 d.	150 15 8	301 0 0	Aug. 1872	4 0 0 . . .	Aug. 1872
2450 Cook's Kitchen, c, Illogan	19 14 9	—	29 28	11 9 6	Oct. 1872	1 16 0 . . .	Oct. 1872
10240 Devon Gt. Consols, c, Tavistock*	0 2 0	7 1/4	7 7 1/4	116 10 0	Oct. 1872	1 16 0 . . .	Oct. 1872
656 Ding Dong, t, Guival	49 14 6	—	—	—	Oct. 1872	7 10 0 . . .	Oct. 1872
4230 Doleath, c, t, Camborne	10 14 10	67 1/2	65 67 1/2	100 6 8	Oct. 1872	4 0 0 . . .	Oct. 1872
16000 East Ballesford, t, Sancroft*	1 0 0	—	—	—	Oct. 1872	0 5 0 . . .	Oct. 1872
6144 East Caradon, c, St. Cleer	2 14 6	4 1/4	4 1/4	14 19 0	Oct. 1872	2 0 0 . . .	Oct. 1872
300 East Darren, t, Cardiganshire	32 0 0	—	208 10 0	1 0	Nov. 1872	1 0 0 . . .	Nov. 1872
6400 East Pool, t, Illogan	0 9 9	14	13 14	13 3 9	Nov. 1872	0 2 0 . . .	Nov. 1872
2809 Foxdale, t, Isle of Man*	25 0 0	—	—	80 15 0	Oct. 1872	0 10 0 . . .	Oct. 1872
5000 Frank Mills, t, Christow	3 18 6	—	—	8 0 0	Aug. 1872	0 10 0 . . .	Aug. 1872
3950 Gawton, c, Tavistock	8 10 6	3	2 1/2 3	0 13 0	Oct. 1872	0 10 0 . . .	Oct. 1872
4000 Glasgow Cava, * (30,000 £1 p., 10,000 15s. p.)	—	—	—	10 0 0	Oct. 1872	0 10 0 . . .	Oct. 1872
15000 Great Laxey, t, Isle of Man*	0 0 0	15 1/2	14 15	15 1 0	Oct. 1872	0 10 0 . . .	Oct. 1872
5908 Great Wheel, t, c, Helston	40 0 0	6 1/4	6 6 1/2	18 19 6	June 1872	0 10 0 . . .	June 1872
6400 Great Hurth, t, Cumbria*	0 6 0	—	5 1/2 6	12 0 0	Dec. 1872	0 10 0 . . .	Dec. 1872
10240 Gunnislake (Clitters), t, c	4 19 0	—	—	0 2 0	Oct. 1872	0 10 0 . . .	Oct. 1872
10244 Herodsfoot, t, near Liskeard*	8 10 0	17 1/2	15 17	62 5 0	Oct. 1872	0 10 0 . . .	Oct. 1872
6000 Hind-ton Down, c, Calstock t	6 4 0	8 1/2	8 8 1/2	4 3 0	Dec. 1872	0 10 0 . . .	Dec. 1872
25000 Killaloe, s-l, Tipperary	1 0 0	—	—	0 2 11 0	Dec. 1872	0 10 0 . . .	Dec. 1872
400 Lishmore, t, Cumbria	18 15 8	—	—	554 10 0	Nov. 1872	0 10 0 . . .	Nov. 1872
2784 Lovell, t, Wendron	3 0 0	—	11 10 11	0 8 0	Nov. 1872	0 10 0 . . .	Nov. 1872
9000 Marke Valley, c, Cardigan*	4 10 6	3 1/4	3 3 1/4	7 13 0	Dec. 1872	0 10 0 . . .	Dec. 1872
9000 Miners' Mining Co., t, Wrexham*	5 0 0	—	—	61 15 8	Nov. 1872	0 10 0 . . .	Nov. 1872
20000 Mining Co. of Ireland, c, t, * ²	7 0 0	9 1/2	—	0 8 0	Dec. 1872	0 10 0 . . .	Dec. 1872
6400 New Pembroke, t, c, Par Station	5 0 0	—	—	0 17 0	Oct. 1872	0 10 0 . . .	Oct. 1872
12000 North Hendre, t, Wales	2 10 0	—	—	0 5 0	June 1872	0 10 0 . . .	June 1872
5694 Poldrin-an-Dreya, t, Redruth	10 12 0	—	15 15 16	4 13 0	Dec. 1872	0 10 0 . . .	Dec. 1872
5000 Porthllan, t, St. Austell	8 2 0	10 1/2	9 1/2 10	0 5 0	Nov. 1872	0 10 0 . . .	Nov. 1872
5000 Pennalls, t, St. Agnes	3 0 0	3 1/2	3 3 1/2	39 12 0	Aug. 1872	0 10 0 . . .	Aug. 1872
1772 Polterro, t, St. Agnes	15 0 0	—	—	1 12 0	Dec. 1872	0 10 0 . . .	Dec. 1872
2000 Polidice, t, c, Gwennap	10 0 0	—	—	1 10 0	Oct. 1872	0 10 0 . . .	Oct. 1872
18000 Providence, t, U. G. Lant*	1 0 6 7	21	18 20	104 12 0	Oct. 1872	0 10 0 . . .	Oct. 1872
12000 Prince Patrick, s-l, Holwell	1 0 0	—	2 1/4 3	0 1 0	Dec. 1872	0 10 0 . . .	Dec. 1872
12000 Royal Gravels, t, Salop	7 10 0	18 1/2	18 19	1 6 0	Dec. 1872	0 10 0 . . .	Dec. 1872
5869 Rosewall Hill and Ransom, t	4 0 0	2	1 1/2 2	0 14 0	June 1872	0 10 0 . . .	June 1872
10000 Shelton, c, t, St. Austell	1 0 0	—	—	0 1 0	Dec. 1872	0 10 0 . . .	Dec. 1872
512 South Caradon, c, St. Cleer	1 5 0	190	170 190	698 10 0	Dec. 1872	0 10 0 . . .	Dec. 1872
8000 South Carr Brea, c, Illogan	1 11 6	4 1/4	4 4 1/4	0 18 0	Dec. 1872	0 10 0 . . .	Dec. 1872
6000 South Darren, t, Cardigan*	3 6 6	—	—	1 1 6	Nov. 1872	0 10 0 . . .	Nov. 1872
242 Spears Moor, t, St. Just	36 17 9	—	17 5 0	0 5 0	June 1872	0 10 0 . . .	June 1872
940 St. Ives Consols, t, St. Ives	10 15 0	11 1/2	10 11	0 10 0	Oct. 1872	0 10 0 . . .	Oct. 1872
8771 St. Just Amalgamated, t*	3 10 0	—	—	0 9 0	Dec. 1872	0 10 0 . . .	Dec. 1872
12000 Tankerville, t, Salop*	6 0 0	15	14 15	3 2 0	Dec. 1872	0 10 0 . . .	Dec. 1872
25000 Tincroft, t, St. Austell	1 0 0	—	2 1/2 2	0 3 0	Dec. 1872	0 10 0 . . .	Dec. 1872
6000 Tincroft, t, Poil, Illogan	9 0 0	56 1/2 d.	55 57 1/2	42 13 6	Dec. 1872	0 10 0 . . .	Dec. 1872
4000 Trumpet Consols, t, Helston	5 15 0	—	13 14	9 11 0	Dec. 1872	0 10 0 . . .	Dec. 1872
15000 Van, t, Llanidloes*	4 5 0	38	36 38	8 0 0	Dec. 1872	0 10 0 . . .	Dec. 1872
3000 W. Chiverton, t, Perranzabuloe	10 0 0	—	—	0 10 0	Oct. 1872	0 10 0 . . .	Oct. 1872
2048 West Wheal Frances, t, Illogan	26 13 9	17	16 1/2 17 1/2	3 12 6	Dec. 1872	0 10 0 . . .	Dec. 1872
400 West Wheal Seton, c, Camborne	47 0 0	50	40 45	79 10 0	Dec. 1872	0 10 0 . . .	Dec. 1872
12288 Wheal Arthur, t, Calstock	1 0 0	—	—	0 3 0	Dec. 1872	0 10 0 . . .	Dec. 1872
512 Wheal Bassett, t, Illogan	5 2 6	65	55 60	11 18 0	Dec. 1872	0 10 0 . . .	Dec. 1872
517 Wheal Grenville, c, Camborne*	7 14 6	7	6 1/2 7 1/2	0 13 6	Dec. 1872	0 10 0 . . .	Dec. 1872
2048 Wheal Jane, t, Kea	2 13 10	6 1/2	6 1/2 7	10 0 0	Dec. 1872	0 10 0 . . .	Dec. 1872
4255 Wheal Kitty, t, St. Agnes	5 4 6	15	14 15	9 8 0	Dec. 1872	0 10 0 . . .	Dec. 1872
2048 Wheal Kitty, t, U. Lant	3 10 6	—	—	14 2 6	Dec. 1872	0 10 0 . . .	Dec. 1872
896 Wheal Margaret, t, U. Lant	13 17 6	11	8 10	82 2 3	Dec. 1872	0 10 0 . . .	Dec. 1872
1024 Wheal Mary Ann, t, Menheniot	10 0 0	10	9 10	73 19 0	Dec. 1872	0 10 0 . . .	Dec. 1872
10000 Wheal Hutchings, t, Plympton	2 12 8	—	—	2 4 0	Dec. 1872	0 10 0 . . .	Dec. 1872
80 Wheal Owles, t, St. Just	70 0 0	—	—	52 12 0	Dec. 1872	0 10 0 . . .	Dec. 1872
12000 Wheal Russell, t, Tavistock	1 0 0	—	—	0 2 0	Dec. 1872	0 10 0 . . .	Dec. 1872
4006 Wheal Unity, t, Redruth	10 14 6	5	4 1/4 5 1/4	0 19 0	Dec. 1872	0 10 0 . . .	Dec. 1872
10000 Wheal Whisper, t, c, Warleggan*	1 0 0	—	—	0 1 0	Dec. 1872	0 10 0 . . .	Dec. 1872
20873 Wicklow, c, s-l, t, Wicklow	2 10 0	—	—	52 12 6	Dec. 1872	0 10 0 . . .	